# *National Water Quality Network*

## ANNUAL COMPILATION OF DATA

### October 1, 1961–September 30, 1962

*A Federal, State and local cooperative report on water quality determinations of surface waters at selected locations throughout the United States*

* * *

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service, *Division of Water Supply and Pollution Control* • Washington, D.C. 20201

## RELATED PUBLICATIONS:

National Water Quality Network
Annual Compilation of Data, October 1, 1957–September 30, 1958
Public Health Service Publication No. 663 (1958 Edition)

National Water Quality Network
Statistical Summary of Selected Data, October 1, 1957–September 30, 1958
Public Health Service Publication No. 663—Supplement I

National Water Quality Network
Annual Compilation of Data, October 1, 1958–September 30, 1959
Public Health Service Publication No. 663 (1959 Edition)

National Water Quality Network
Annual Compilation of Data, October 1, 1959–September 30, 1960
Public Health Service Publication No. 663 (1960 Edition)

National Water Quality Network
Plankton Population Dynamics, July 1, 1959–June 30, 1961
Public Health Service Publication No. 663—Supplement 2

National Water Quality Network
Annual Compilation of Data, October 1, 1960–September 30, 1961
Public Health Service Publication No. 663 (1961 Edition)

***PUBLIC HEALTH SERVICE PUBLICATION NO. 663***
**(1962 Edition)**

# ACKNOWLEDGMENT

To increase the usefulness of the water quality data, annual compilations since 1958, including this one, have presented preliminary and unadjusted flow data for gauging stations at or near most of the National Water Quality Network sampling points. Final data may be obtained directly from the agency concerned. Any studies using the provisional flow data herein compiled should verify the data prior to completion of reports on such studies. For making the flow information available for this publication, grateful acknowledgment is made by the Public Health Service to:

The International Boundary and Water Commission, United States and Mexico
The U.S. Department of the Interior
    Bureau of Reclamation ● Geological Survey
The U.S. Department of the Army
    Corps of Engineers ● Lake Survey

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# FOREWORD

This is the fifth annual compilation of data from the National Water Quality Network of the Public Health Service. During this year the Network was increased from 93 to 122 stations. The data have revealed interesting findings, particularly with respect to synthetic organic chemicals such as insecticides and pesticides, in our surface waters. Sufficient data have been accumulated to define trends in certain areas, such as radioactivity.

The Public Health Service gratefully acknowledges the assistance to our Network of the participating local, State and Federal government agencies and private industry. The success of this program depends, in large measure, upon their continued interest and support.

Gordon E. McCallum, D. Sc.,
*Assistant Surgeon General,*
*Chief, Division of Water Supply and Pollution Control*

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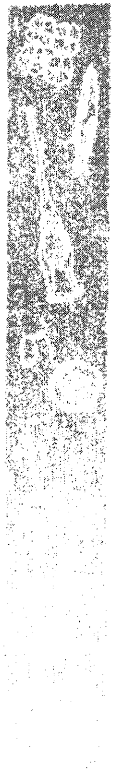

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# *The National Water Quality Network*

The Public Health Service program for providing fundamental information on the quality of the Nation's waters stems from Public Law 660, approved July 9, 1956, as amended by Public Law 87–88, July 20, 1961. Section 4(c) thereof states: ". . . the Secretary (of Health, Education, and Welfare) shall in cooperation with other Federal, State, and local agencies having related responsibilities, collect and disseminate basic data on chemical, physical, and biological water quality insofar as such data or other information relate to water pollution and the prevention and control thereof."

To fulfill this responsibility, the National Water Quality Network collects, interprets, and disseminates:

a. Information on changes in water quality at key points in river systems, as such quality may be affected by changes in water use and development.

b. Continuous information on the nature and extent of pollutants affecting water quality.

c. Data which will be useful in the development of comprehensive water resources programs.

d. Data which will assist State, interstate, and other agencies in their water pollution control programs, and in the selection of sites for legitimate water uses.

Some 50 sampling stations were established when the program started, October 1, 1957. By September 30, 1962, the number had grown to 122.

Each sampling location satisfies one or more of the following criteria:

a. Major waterways used for public water supply, propagation of fish and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses.

b. Interstate, coastal, and international boundary waters.

c. Waters on which activities of the Federal Government may have an impact.

Sampling station sites are fixed only after consultation with local, State, Federal and other agencies having related interests.

Active local participation is important in this operation. It assures maximum development of all information valuable both locally and nationally. Program costs are shared by the Federal Government and state and local agencies, those of the latter through contributions of laboratory and sampling manpower. Specifically, the State and local agencies perform certain of the conventional chemical analyses and collect samples for the newer, more complex examinations. The Public Health Service, in turn, performs the more complex determinations and makes the results available to the participants and to the public. In addition, the consultation, training facilities, and other resources of the Public Health Service are available to the cooperating agencies.

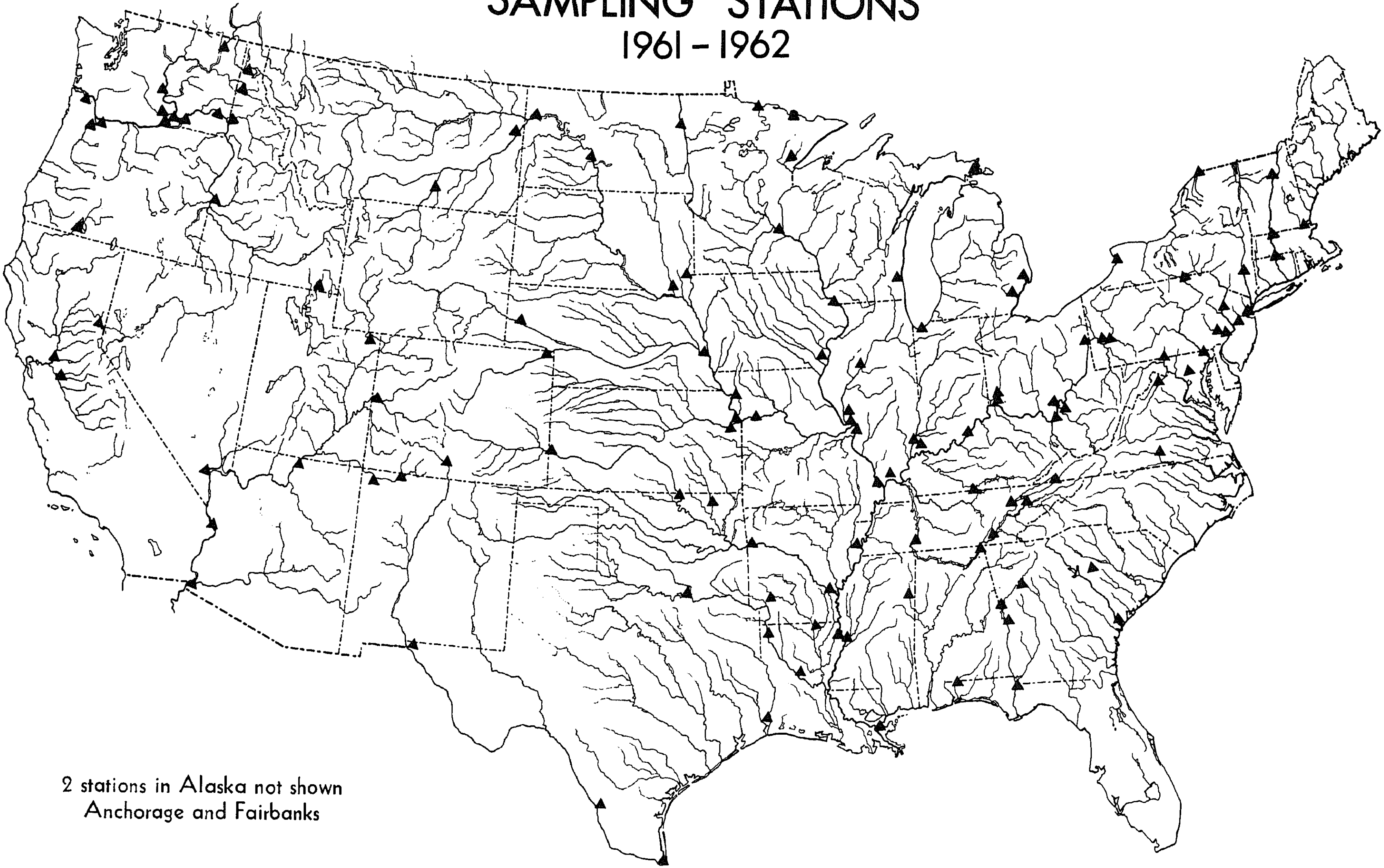
Locations of sampling stations in operation as of September 30, 1962, are shown on page 2. Descriptions of the stations, participating agencies, and other pertinent information are presented on pages 19 through 29.

Only after careful screening of needs in water resource development was a pattern set for analyses of water samples.

# *PHS National Water Quality Network*

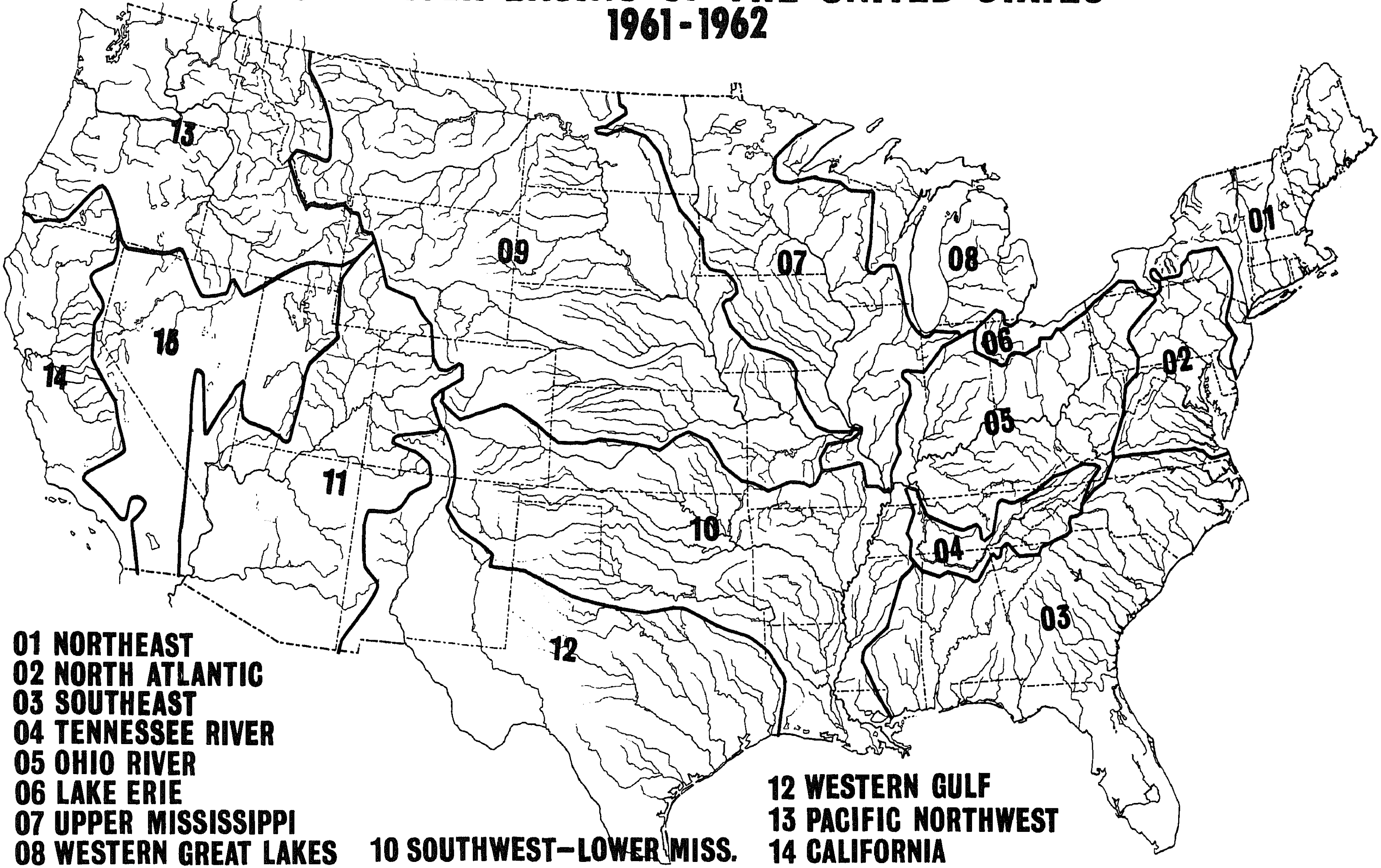
## SAMPLING STATIONS

## 1961 - 1962



2 stations in Alaska not shown
Anchorage and Fairbanks

# MAJOR RIVER BASINS OF THE UNITED STATES
## 1961-1962



01 NORTHEAST
02 NORTH ATLANTIC
03 SOUTHEAST
04 TENNESSEE RIVER
05 OHIO RIVER
06 LAKE ERIE
07 UPPER MISSISSIPPI
08 WESTERN GREAT LAKES
09 MISSOURI RIVER
10 SOUTHWEST—LOWER MISS.
11 COLORADO RIVER
12 WESTERN GULF
13 PACIFIC NORTHWEST
14 CALIFORNIA
15 GREAT BASIN

All Network samples are examined for:

- a. Radioactivity.
    - (1) Gross alpha.
    - (2) Gross beta.
    - (3) Strontium 90.
- b. Plankton populations.
- c. Coliform organisms.
- d. Organic chemicals.
- e. Biochemical, chemical, and physical measurements, including biochemical oxygen demand (BOD), dissolved oxygen (DO), chemical oxygen demand (COD), chlorine demand, ammonia nitrogen, hydrogen ion concentration (pH), color turbidity, temperature, alkalinity (or acidity), hardness, chloride, sulfate, phosphates and total dissolved solids.
- f. Sodium, potassium, boron, selenium and trace elements.

Samples for groups c and e were collected and analyzed weekly. Samples for organic chemicals were collected and analyzed monthly and plankton organism examinations were conducted semimonthly. Water samples for analysis of suspended and dissolved gross alpha and beta radioactivity were submitted weekly. Strontium 90 analyses were made on composites of weekly samples accumulated over 3-month periods. Sodium, potassium, boron, selenium and trace metals were determined on 4-month composites of weekly samples. New parameters which are developed and found significant will be included as the program continues.

# *Analytical Methods and Reliability of Data*

The physical, chemical, and biochemical data included in this publication are the result of cooperative efforts of the agencies listed in column 6, pages 19–29. In general, most of these measurements were contributed by their laboratories. While it is recognized that individual laboratories make minor modifications to meet local conditions, the methods used in most cases are those published in the 11th edition, "Standard Methods for the Examination of Water and Wastewater." For uniformity, the chlorine demand test is reported on the basis of the starch-iodide titration procedure, and the chemical oxygen demand test is restricted to the use of 0.025 N reagents.

To assure continued reliability in the published data, frequent analysis of reference samples by each cooperating laboratory constitutes an integral part of the overall program. Periodically a synthetic standard sample is provided to each participant for reference analysis. The reported results are reviewed. Any significant errors are called to the attention of the reporting laboratory and, after the cause of the errors has been determined, the previously submitted data are either corrected or discarded. From these findings, the analyses reported in this compilation are believed to be accurate to ±10 percent of the reported values.

The analytical methods used by the Public Health Service laboratories are described in the discussion of water quality parameters which follows, and are covered by several of the references listed in the Bibliography.

# *Water Quality Parameters*

In the assessment of water quality all of the legitimate purposes for which raw waters can be used, and which may be affected by pollution, must be considered. These may range from the minimum requirements necessary for navigation to the ultimate in water quality demanded for special industrial processing. Quality needs differ considerably, therefore, according to water use.

For domestic use, water must be free of disease organisms, clear, colorless, taste- and odor-free, and have a relatively low dissolved mineral content. Agricultural water is judged primarily on its mineral content, especially with respect to the ratio of sodium to other cations, and the presence of boron. Water for fish propagation and recreational purposes must be relatively free from domestic and industrial pollution and must be able to sustain an active flora of the smaller aquatic organisms on which fish and wildlife feed. Industrial water quality demands run the gamut from the complete absence of minerals to a requirement of low temperature, the critical factor in water used for cooling. The effects of radioactive materials on these uses have not yet been fully appraised.

The various laboratory examinations made as part of this program are discussed below.

## Radioactivity

Radioactivity, long recognized as a contaminant of water from natural sources, has continued to grow in importance and health significance with the development of nuclear energy for both military and peaceful uses. Consequently, levels must be measured continually as new sources are established.

Gross alpha and beta measurements are made on both suspended and dissolved solids in the raw surface water samples. The total radioactivity in the dissolved solids provides a rough measure of the levels which may be found in a treated water, where water treatment removes substantially all of the suspended matter.

Beta activity levels generally reflect the variable contamination resulting from fallout and discharges from nuclear energy installations, institutions utilizing radioactive materials, and other manmade sources. The trend of gross beta radioactivity in samples received from 47 of the National Water Quality Network stations operating since 1957 is presented in Figure 1. During the last quarter of the 1961 calendar year and the first and second quarters of the 1962 calendar year, renewed weapons testing was responsible for the rise in gross beta radioactivity levels in the waters of the United States. During the third quarter of the 1962 calendar year the level decreased. This is attributable, for the most part, to the seasonal decrease of runoff. Radioactivity levels have remained well below the Public Health Service Drinking Water Standard of 1,000 $\mu\mu c/l$ (*19*).

Alpha levels reflect largely the activity added by uranium and thorium daughters. The waters of the United States can be characterized in a general way with respect to gross alpha radioactivity content. Such a characterization, based on National Water Quality Network data collected through the 1962 water year is presented in Figure 2.

687-228 O-63—2

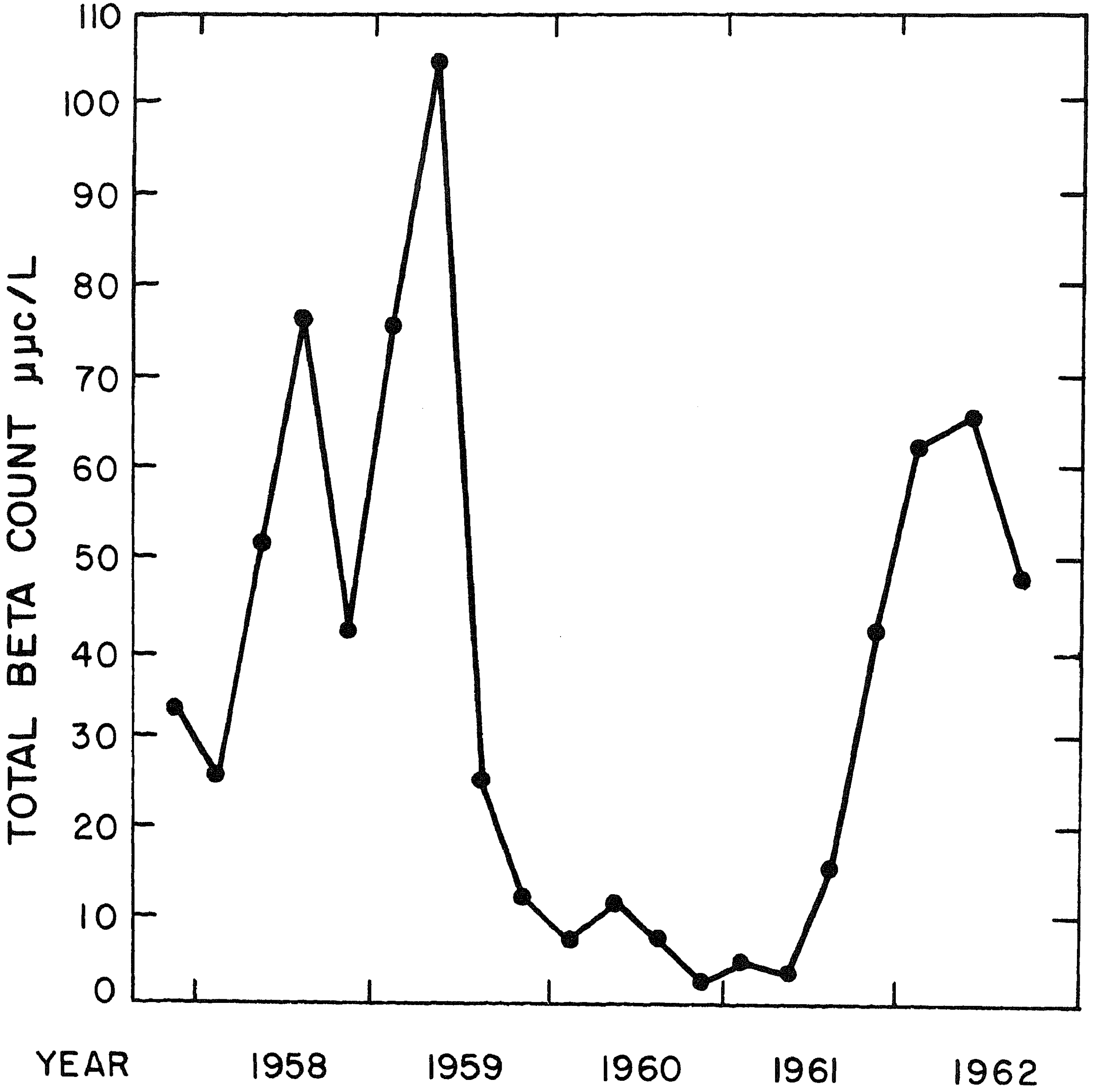


*Figure 1. Gross Beta Radioactivity in the Surface Waters of the United States*

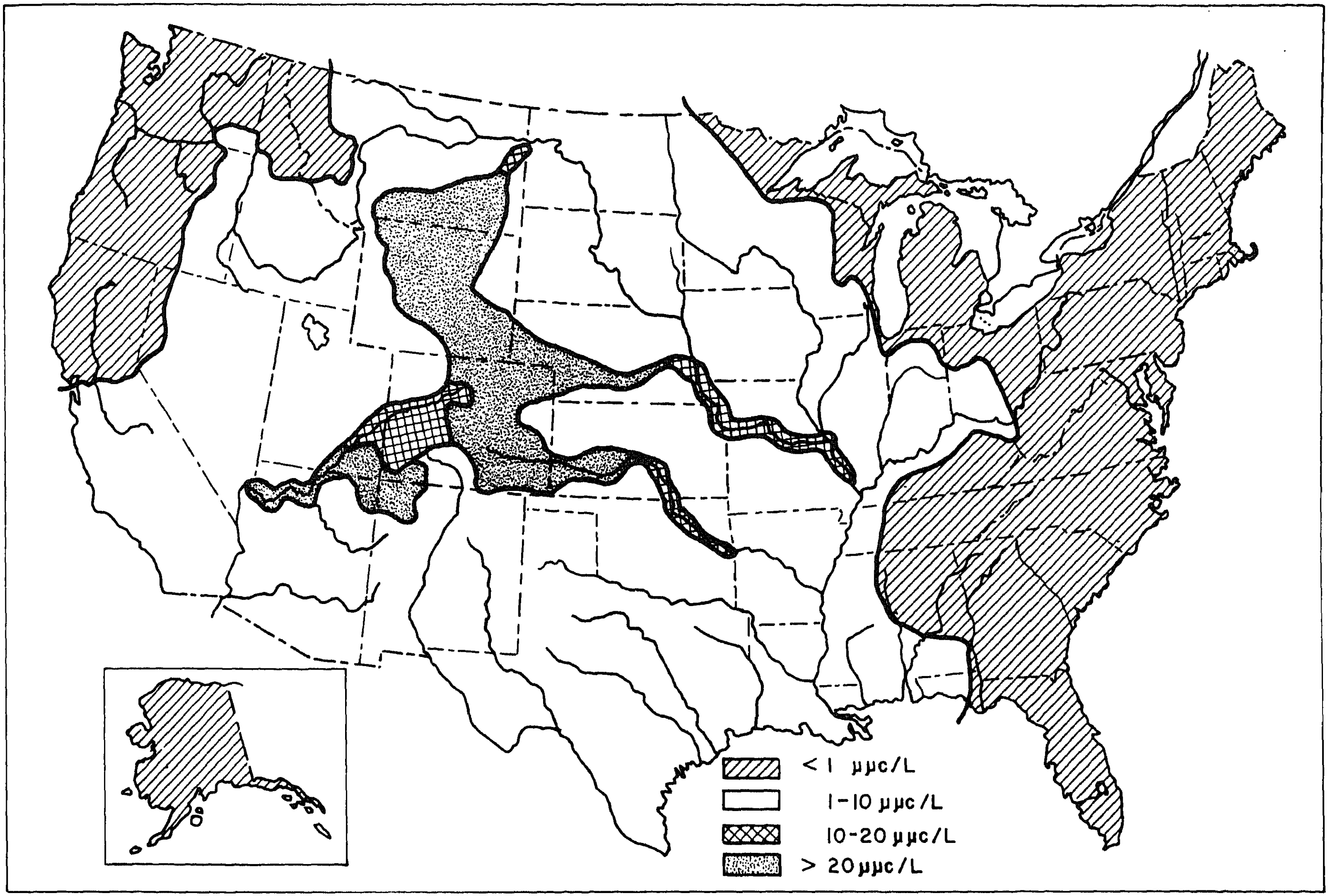


*Figure 2. Gross Alpha Radioactivity Levels in the United States: 1957–62*

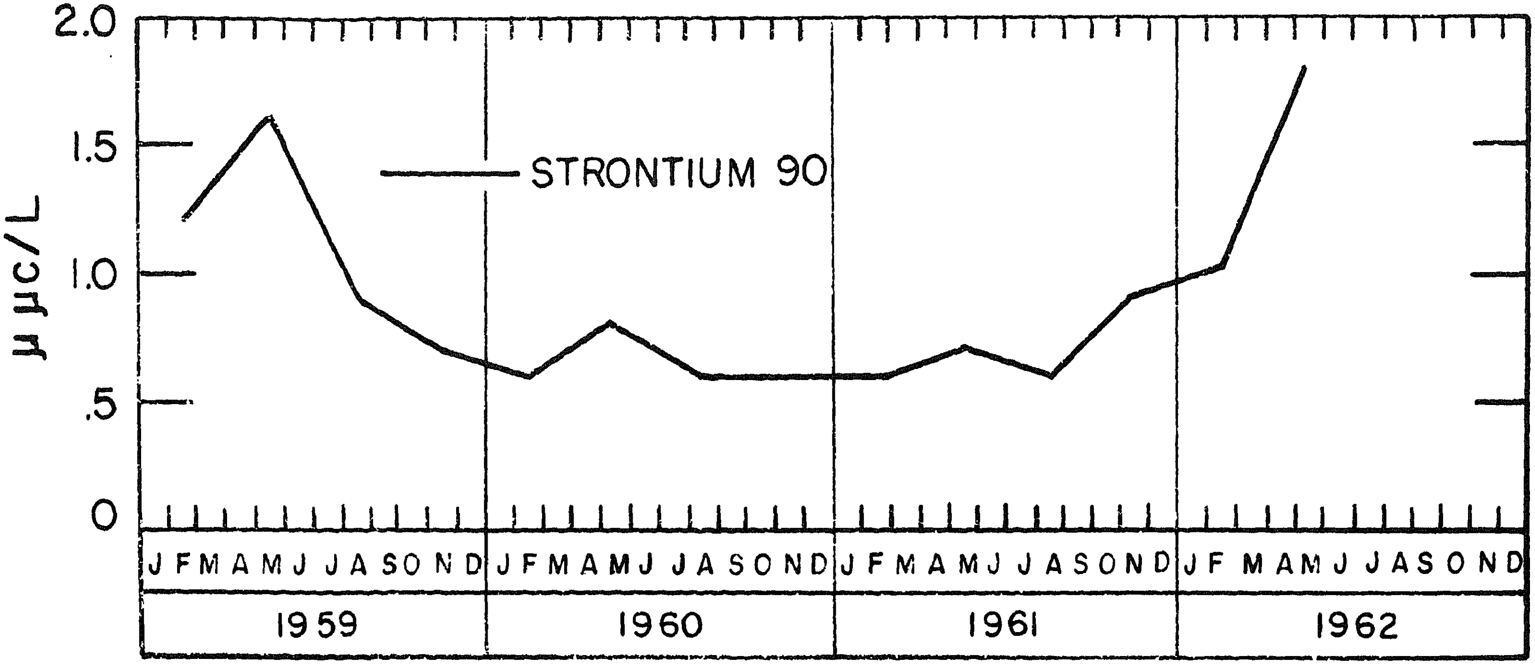


*Figure 3. Strontium 90 in the Surface Waters of the United States*

Gross levels are most informative in evaluating long-term trends or changes in water quality. By themselves, however, they are of limited value in assessing radiation exposure. Where gross results are consistently over the maximum permissible concentrations for mixed fission products, the identity of the specific radionuclides involved must be established.

Because of its significance in the environment, the concentration of Strontium 90 in the total solids is also reported. The levels ranged from 0.1 to 6.1 and the national quarterly average was less than the limit (10 $\mu\mu c/1$) specified in the Public Health Service Drinking Water Standards (*19*). The levels of Strontium 90 activity in the waters of the United States since the first quarter of the 1959 calendar year are presented graphically in Figure 3. Strontium 90 levels during the 1960–61 water year may be considered essentially background for the surface waters of the United States. The curve observed in Figure 3 shows an increase in these levels following the resumption of weapons testing in 1961. Levels increased steadily during the first three quarters of the 1961–62 water year, as did the gross beta radioactivity levels.

## Populations of Plankton

Many aquatic organisms are sensitive to the various substances which enrich or pollute water. Some of these develop only in relatively clean water, while others may be stimulated to live and multiply in the presence of certain types of pollutants, especially household sewage and certain kinds of industrial wastes. On the other hand, excessive toxic substances may reduce or eradicate planktonic crops. Large populations of algae are sometimes induced to develop by mineralized products of sewage decomposition when nitrates and phosphates are made available as nutrients. Planktonic organisms are also important because of their ability to concentrate a wide variety of radionuclides. Impoundment of water by navigation or hydroelectric dams often increases the density of planktonic blooms.

The plankton data give the numbers, kinds and occurrences of algae and other aquatic microorganisms in the water. This information is useful in determining the pollutional status of any water resource, and in indicating the relative numbers of organisms which may cause problems in the treatment and use of water.

These organisms interfere with water use through shortening of filter runs in treatment plants, and by causing tastes, odors, coloration and various chemical and physical changes in the water environment. By regular and frequent reference to the plankton counts, it is possible to determine the procedures that will be required in treating the water for use.

In the stream or lake itself, many planktonic organisms are known to improve water quality by providing food and oxygen for desirable aquatic life and by aiding in the recovery of polluted water. They may form unsightly blooms, mats and slime growths; release toxic products which kill fish and other animals; and, upon dying and decomposing, exert a biochemical oxygen demand which uses up all oxygen in the water.

Domestic and industrial wastes influence the kinds and numbers (or diversity) of organisms. Hence, plankton may reflect changes in water quality resulting from changes in the wastes received by the stream containing suspended and dissolved substances. In addition, each geologic area of the United States has a distinctive phytoplankton population.

Relatively low phytoplankton counts ordinarily occur at sampling stations on the Great Lakes, the Columbia River, and on many rivers in the Southeast. Such stations as the Arkansas River at Ponca City, Okla., the Illinois River at Peoria, Ill., and the Mississippi River below St. Paul, Minn., show extremely high counts, but with lower species diversity. Waters receiving heavy organic waste loads at Winfield, W. Va., on the Kanawha River and on the upper Ohio River, however, show low plankton counts, probably resulting from toxic effects of wastes in the waters.

During the spring of 1962, unusually high total live phytoplankton counts were observed in the Ohio River at Cincinnati, Louisville, and Evansville. These high counts were followed in August and September by exceptionally low counts. Such deviations from the normal reflect changes in water quality which may be of real significance to treatment plant operators and to water pollution control authorities.

## *Counting Procedures*

Sampling for plankton analysis is conducted semimonthly. Each sample consists of three liters of raw water, collected directly from the stream or a treatment plant intake. The sample is preserved during shipment by adding 100 ml. of preservative solution (0.1 percent Thimerosal, 0.1 percent sodium borate, and 0.2 percent Lugol's solution).

Phytoplankters are counted on the Sedgwick-Rafter slide. The analysis for nannoplankton is made by counting a 100-mm. strip on the Sedgwick-Rafter slide, using a 200 × magnification. The small centric and pennate diatoms (those not forming filaments or colonies) are identified from specially prepared hyrax slides using 900 × magnification and apochromatic resolution.

Rotifers, crustacea and other microinvertebrates are enumerated under a compound microscope at 100× magnification. A raw liter sample is settled and the sediment, when necessary, is washed of colloidal material and tiny silt particles. These microinvertebrates are counted in a special slide measuring 80 x 50 x 2 mm. These animals are known to be heavy consumers of phytoplankton and organic detritus, and they are an important link in the food chain supporting fish populations.

Identification of diatom species and their proportional census is done from incinerated frustules of diatoms settled and washed from a liter of sample. The washed sediment containing the diatoms is dried on a warming table on a number one coverglass, and this sediment is ashed in place on the coverslip on a red-hot hotplate. This method does not change the minute identification markings of the siliceous cell walls and enables the two valves (epitheca and hypotheca), as well as the groups of cells attached to one another to remain in a natural grouping, so that Sedgwick-Rafter counts and proportional counts can be matched. Permanent slide mounts are made with hyrax medium. The technique of settling, washing in distilled water and mounting does not appear to alter the uniformity of the diatom species composition. Proportional counts are made with 90-power oil immersion apochromatic objectives and 10-power oculars containing a Whipple micrometer grid. Random strip counts are made until the total number of units reaches two hundred to three hundred.

Proportional counting of diatoms from permanent slides is on a modified unit-area basis, in which each single cell or each portion of a natural aggregate occupying up to 300 square microns ($\mu^2$) is tallied as one unit, cells or aggregates occupying from 300 to 1,000 $\mu^2$ as two, those 1,000 to 2,500 $\mu^2$ as three, those 2,500 to 5,000 $\mu^2$ as four and those over 5,000 $\mu^2$ as five. The Whipple grid makes this scaling simple. This system gives a slight weighting to the larger specimens and colonies, which are seldom numerically abundant, but it is basically the same as the Sedgwick-Rafter count used for enumerating the other phytoplankters. About 95 percent of the cells or clumps naturally fall into size class one or two.

# Organic Chemicals

The Nation's water resources continue to receive increasing quantities of organic contaminants. Since 1940 the chemical industry, particularly in the manufacture of synthetic and petrochemicals, has experienced an enormous expansion that shows every sign of continuing. Each year millions of pounds of synthetic detergents, insecticides, herbicides, and similar domestic products find their way into our streams from

Effective and economical treatment methods for most of the complex organic materials remain to be developed. Even where treatment exists, residues may remain in sufficient quantity to cause water damage. These stable residues persist through sewage treatment, biological and chemical action of the stream, and water treatment processes, and finally reach the consumer in drinking water.

The presence of some of these materials, even at concentrations considerably less than 1 part per million, may impair water quality, most noticeably in production of tastes and odors. Fishflesh tainting, also quickly noticed by the consumer, is another damage. Effects on water treatment, many of which are ill-defined at present, and impairment of water quality for industrial uses are being reported with increasing frequency. Essentially nothing is known of the possible immediate or long-term effects of these materials on human health. Such information is urgently needed.

The usual sanitary analyses are not effective in measuring these newer organic contaminants. Yet it is essential to know something of their concentrations and character. A method known as the "Carbon Adsorption Technique," developed by the Public Health Service, permits the concentration of these organic compounds from a large volume of water. Elution of the adsorbed materials with organic solvents, followed by chemical separation and testing, provides useful information concerning organic pollution and for assaying river systems for these substances.

Field studies, replicate samples taken simultaneously from the same source, and subsequent replicate analysis, indicate a reproducibility for a single source, of ±10 percent. Moreover, experiments conducted in the laboratory with known solutions of organic substances indicate that adsorption efficiencies may approach 100 percent under carefully controlled conditions. However, data from many individual samples collected on different river systems strongly suggest that the adsorption efficiency may vary because of differences in the site. The results of desorption efficiency tests run in the laboratory range from 50 to 90 percent. Therefore, comparison of results on a quantitative basis should be approached with caution.

Following continuous flow of about 5,000 gallons of water through the carbon adsorption column over a 7- to 10-day period, material on the carbon adsorption column is extracted with two solvents, chloroform and alcohol.

The extracts are weighed, and the concentration of these materials in the water sampled is then computed. Results are recorded in parts per billion (micrograms per liter). Clean waters may contain 20 to 50 ppb. of chloroform extractables and 50 to 100 ppb. of alcohol extractables. Polluted waters contain several times these concentrations.

## *Chloroform Extracts*

The organic residue recovered from the carbon adsorption column by chloroform is very complex. It is desirable to separate the crude extract into certain broad chemical classes, and this can be done on the basis of solubility differences. The various classes or groups and their general significance are discussed briefly below.

### Ether Insolubles

This group is usually a brown, humus-like powder, apparently composed to a large extent of carboxylic acids, ketones, and alcohols of complicated structure. Origin of the group, which is an indicator of "old" pollution, is believed to be partially oxidized sewage and industrial wastes. For example, the Ohio River at Cincinnati has been exposed to much industrial and sewage pollution, and hence large amounts of ether insoluble materials are found. Streams with little or no pollution history have little or no ether insolubles. Chloroform extracts contain from 0 to 30 percent of ether insoluble material.

### Water Solubles

These substances are largely acidic and undistillable at moderate temperatures, but their solubility in ether indicates that the molecules are smaller and probably simpler than the ether-solubles. On the other hand, their water solubility practically requires the presence of several functional groups, such as hydroxy-acid, keto-acid, and keto-alcohol. Such compounds probably originate from partial oxidation of hydrocarbons or they may be natural substances. They have very little odor. These materials usually make up 10 to 20 percent of the total extract.

### Weak Acids

This group is characterized by being removed from ether solution with sodium hydroxide but not with sodium bicarbonate. Phenols are the best known weak acids, and if present in the water, appear in this group. Other weakly acidic compounds include certain enols, imides, sulfonamides, and some sulfur compounds. This group of materials also occurs in nature. The weak acids are odorous, and commonly constitute 5 to 20 percent of the chloroform extract.

### Strong Acids

These acids are usually carboxylic acids such as acetic, benzoic, salicylic or butyric. Although classified as strong in reference to carbonic acid, they are actually weak when compared with a mineral acid, such as sulfuric. Many of the compounds are used industrially, but may also be produced by natural processes, such as fermentation. Some of the materials are highly odorous. This fraction makes up from 5 to 20 percent of the total. The significance of the strong acids can be interpreted only in the light of stream pollution conditions.

### Bases

These compounds are organic amines. Such materials as aniline and pyridine are amines of commerce. Lower amines may occur as a result of decomposition. Although odorous, the low concentrations found are not likely to cause objectionable conditions. However, in the case of specific amine-containing wastes the compounds can be of considerable significance. Generally, only 1 or 2 percent of the total extract is made up of the bases.

### Neutrals

This group frequently constitutes the major portion of the chloroform extract. Neither basic nor acidic, the materials are less reactive and tend to persist in streams longer than many other types. Hydrocarbons, aldehydes, ketones, esters, and ethers are examples of neutral materials. The group lends itself to further fractionation by means of chromatographic separation into aliphatic, aromatic, and oxygenated subgroups:

> *Aliphatics:* This portion represents petroleum type hydrocarbons in a considerable state of purity, and is usually made up of mineral oil type of material. The percentage of aliphatics present yields important information about the possible source of pollution, since petroleum is the most likely source.
>
> *Aromatics:* These are principally the coal tar hydrocarbons such as benzene, toluene, and a host of others, and their presence in any significant amount is a reliable indication of industrial pollution. Further, the materials can frequently be identified by infrared spectrophotometry. Some aromatic compounds which have been found in our rivers—and in our drinking water—include DDT, aldrin, phyenyl ether, orthonitrochlorobenzene, pyridine, phenol, and others. The materials are highly odorous, and may also be toxic. Their appearance in any quantity as pollutants should receive careful evaluation.

*Oxygenated compounds (Oxys).* These are the neutral compounds containing oxygen, such as aldehydes, ketones, and esters. They may have originated by direct discharge or may represent oxidation products from both natural and industrial materials. They help to indicate the "age" of the pollution, since pollution exposed to oxidation forces for a long time would be expected to contain large amounts of oxys. The oxy materials are odorous.

**Losses**

Manipulative losses inherent in this type of separation may amount to 10 to 15 percent. Losses greater than this may indicate that volatile components were lost from the sample. Such volatiles may have significance as pollutants.

## *Alcohol Extracts*

The alcohol extractables generally consist of materials more polar than the chloroform extractables. They often contain synthetic detergents, carboxylic acids and humic materials which may originate naturally or from oxidized products of domestic and industrial wastes. These classes of substances are not quantitatively recovered by the alcohol extraction. For example, this extraction recovers only 20 to 30 percent of the synthetic detergents present. On waters of mixed industrial and domestic pollution, the chloroform and alcohol extractables may be about equal. On some streams where the industrial pollution is rather low and much natural pollution or sewage is present, the alcohol extractables may exceed the chloroform extractables by a factor of 4 to 6.

The alcohol extract is usually only partially soluble in water and most ordinary solvents. Very little further chemical separation of this material is currently practical. However, tests have revealed that synthetic detergents may make up 1 to 12 percent of the alcohol extract.

## *Other Tests*

Infrared spectra are routinely run on the total chloroform and alcohol extracts as well as the neutral, aliphatic, aromatic and oxygenated groups which are usually the most significant. Spectra of other groups are obtained when there is an indication that they may be significant. These spectra reveal something of the chemical structure of the materials, indicate differences and in certain instances provide a definite identification. In the case of the alcohol extracts, the infrared spectra will indicate the presence of synthetic detergents if the materials constitute a significant portion.

## *Composite Analysis*

Samples from certain locations have been selected for analysis on a quarterly composite basis. Stations that have collected at least twelve samples in a nearly consecutive manner and averaged 100 ppb. or less of chloroform extractables are selected for such analysis when certain other conditions are met. However, samples falling in this category are analyzed individually when the recovery of the chloroform extract is exceptionally high and/or it is unusual in its infrared spectrum or some other physical characteristic.

## *Specific Identifications*

Among the 101 stations equipped with carbon adsorption apparatuses, the Kanawha River at Winfield, W. Va., was high both singly and by station average, in carbon chloroform extractables. The highest single and station average values for alcohol extractables were found on the Ohio River at Huntington, W. Va. Samples taken on the Mississippi River at Vicksburg, Miss., recorded the lowest single and station average values for alcohol as well as chloroform extractables.

Detergents were identified in samples from 50 percent of the active stations during the year ended September 30, 1962, as contrasted with a level of 40 percent during the previous year. One of every five carbon adsorption samples contained detergent. These observations should be considered conservative since alcoholic extraction recovers only 20 to 30 percent of detergents adsorbed on the carbon during sampling.

Chlorinated hydrocarbon pesticides were found in numerous samples. (See table below.) Nitriles and amir occurred repeatedly in samples from the Potomac and Shena doah Rivers. Nitrile compounds, forms of organic cyanide, a employed in many industrial processes. Their exact fate watercourses and impact on aquatic life are not complet understood.

## Specific Qualitative Identifications From Carbon Absorption Extracts

| NWQN STA. # | RIVER | LOCATION | SAMPLE DATES | SUBSTANCE (a) IDENTIFIE |
|---|---|---|---|---|
| 87 | Shenandoah | Berryville, Va. | 11/2–11/21(61) | Nitrile |
| 87 | Shenandoah | Berryville, Va. | 12/5–12/18(61) | Nitrile |
| 87 | Shenandoah | Berryville, Va. | 1/3–1/9(62) | Nitrile & Amine |
| 87 | Shenandoah | Berryville, Va. | 1/30–2/6(62) | Nitrile & Amine |
| 87 | Shenandoah | Berryville, Va. | 2/27–3/12(62) | Nitrile & Amine |
| 87 | Shenandoah | Berryville, Va. | 3/27–4/3(62) | Nitrile & Amine |
| 87 | Shenandoah | Berryville, Va. | 4/24–5/1(62) | Nitrile & Amine |
| 87 | Shenandoah | Berryville, Va. | 6/27–7/5(62) | Nitrile & Amine |
| 87 | Shenandoah | Berryville, Va. | 7/5–8/3(62) | Nitrile & Amine |
| 87 | Shenandoah | Berryville, Va. | 8/7–8/15(62) | Nitrile & Amine |
| 87 | Shenandoah | Berryville, Va. | 8/29–9/5(62) | Nitrile & Amine |
| 87 | Shenandoah | Berryville, Va. | 9/26–10/3(62) | Nitrile & Amine |
| 87 | Shenandoah | Berryville, Va. | 10/24–10/31(62)(c) | Nitrile & Amine |
| 87 | Shenandoah | Berryville, Va. | 11/28–12/5(62)(c) | Nitrile & Amine |
| 87 | Shenandoah | Berryville, Va. | 12/26–1/2(63)(c) | Nitrile & Amine |
| 40 | Potomac | Great Falls, Md. | 10/16–10/30(61) | Nitrile |
| 40 | Potomac | Great Falls, Md. | 1/8–1/29(62) | Possible Nitrile |
| 40 | Potomac | Great Falls, Md. | 6/18–6/25(62) | Possible Nitrile & possible Amine |
| 40 | Potomac | Great Falls, Md. | 7/16–7/25(62) | Nitrile |
| 40 | Potomac | Great Falls, Md. | 8/17–8/27(62) | Nitrile |
| 40 | Potomac | Great Falls, Md. | 9/17–9/26(62) | Nitrile & Amine |
| 40 | Potomac | Great Falls, Md. | 10/19–10/29(62)(c) | Nitrile & Amine |
| 40 | Potomac | Great Falls, Md. | 11/15–11/23(62)(c) | Nitrile & Amine |
| 40 | Potomac | Great Falls, Md. | 12/4–12/18(62)(c) | Possible Nitrile |
| 75 | Susquehanna | Conowingo, Md. | 8/1–8/10(62) | DDT |
| 75 | Susquehanna | Conowingo, Md. | 8/30–9/7(62) | DDT |
| 75 | Susquehanna | Conowingo, Md. | 10/2–10/11(62)(c) | DDT &/or DDE |

| | | | | |
|---|---|---|---|---|
| 75 | Susquehanna | Conowingo, Md. | 11/2–11/14(62)(c) | DDT |
| 12 | Delaware | Philadelphia, Pa. | 5/17–5/25(62) | DDT |
| 12 | Delaware | Philadelphia, Pa. | 8/20–8/27(62) | DDT |
| 12 | Delaware | Philadelphia, Pa. | 10/11–10/22(62)(c) | DDT |
| 48 | Savannah | North Augusta, S.C. | 5/4–5/17(62) | Dieldrin |
| 48 | Savannah | North Augusta, S.C. | 7/1–7/14(62) | Dieldrin |
| 48 | Savannah | North Augusta, S.C. | 8/6–8/13(62) | Dieldrin |
| 48 | Savannah | North Augusta, S.C. | 10/1–10/15(62)(c) | Dieldrin |
| 48 | Savannah | North Augusta, S.C. | 11/5–11/19(62)(c) | Dieldrin |
| 120 | Chattahoochee | Lanett, Ala. | 9/7–9/15(62) | DDT |
| 99 | Tennessee | Pickwick Ldg., Tenn. | 7/17–7/31(62) | DDT |
| 99 | Tennessee | Pickwick Ldg., Tenn. | 8/14–8/28(62) | DDT |
| 99 | Tennessee | Pickwick Ldg., Tenn. | 9/11–9/25(62) | DDT |
| 99 | Tennessee | Pickwick Ldg., Tenn. | 10/16–10/23(62)(c) | DDT |
| 46 | Rio Grande | El Paso, Tex. | 7 & 9 (62) | DDT(b) |
| 122 | San Joaquin | Vernalis, Calif. | 8/29–9/11(62) | DDT |
| 116 | Sacramento | Greens Ldg., Calif. | 5/23–6/8(62) | DDT |
| 116 | Sacramento | Greens Ldg., Calif. | 8/9–8/30(62) | DDT |
| 116 | Sacramento | Greens Ldg., Calif. | 9/5–10/9(62) | DDT |
| 89 | Yakima | Richland, Wash. | 6/19–7/12(62) | DDT |
| 89 | Yakima | Richland, Wash. | 8/3–9/20(62) | DDT |
| 89 | Yakima | Richland, Wash. | 11/1–11/20(62)(c) | DDT |
| 112 | Colombia | Northport, Wash. | 10/20–10/27(62)(c) | DDT |
| 9 | Columbia | Pasco, Wash. | 10/5–10/13(62)(c) | Possible DDT |
| 9 | Columbia | Pasco, Wash. | 11/3–11/10(62)(c) | DDT |

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(a) Identifications were made from infrared spectra of the carbon chloroform extract or one of the separated fractions.

(b) Detected in composite sample for periods 7/19–7/29(62) and 8/30–9/14(62).

(c) Included for completeness although sample date not within period covered by this volume.

# Chemical, Physical, and Bacteriological Examinations

The various biochemical, chemical, physical, and bacteriological examinations generally performed by the participating laboratories are discussed below.

## *Ammonia Nitrogen and Chlorine Demand*

The cost of water treatment for domestic use is affected by the consumption of chlorine, with ammonia nitrogen being responsible for a large portion of the chlorine demand. The greater this demand, the more expensive is the treatment. The ammonia may originate from unstabilized domestic pollution, from industrial waste discharges, from run-off containing fertilizers used in farming operations or from all three. The presence of measurable quantities of nitrogen compounds, not necessarily ammonia, is also an indication of the fertility of the stream toward both macro- and micro-biological forms.

## *Color*

Color in domestic water supplies is undesirable. Its removal in the water treatment process, whether it be from natural or industrial sources, may require large doses of chemicals and be expensive.

## *Dissolved Oxygen, Biochemical and Chemical Oxygen Demands*

Biochemical processes, in which aquatic organisms attack and stabilize the organic matter present, require dissolved oxygen. If unstable oxidizable organic matter is present in excess, the organisms will multiply rapidly, consuming the oxygen present in the water, and bring about a foul, septic stream condition. The dissolved oxygen level thus serves to indicate the biochemical activity of the stream. High activity, resulting in low dissolved oxygen levels, will drive out game fish in favor of scavengers. Very low or zero oxygen levels will kill all fish and aquatic organisms dependent on dissolved oxygen for life. Temperature and reaeration rates also affect dissolved oxygen levels.

The 5-day biochemical oxygen demand (BOD) indicates the degree of unstabilized organic pollution from either domestic or industrial sources, to which the stream is being subjected A significant demand will affect the fish and macroorganism population, and waters carrying a high BOD seldom contain game fish. On the other hand, game fish will thrive in streams in which the oxygen demand has been stabilized, as this condition is usually favorable for the growth of organisms on which fish feed.

The chemical oxygen demand analysis serves to support the findings of the biochemical oxygen demand test. It too may indicate to what extent the waste load of the stream has been stabilized, or it may indicate the presence of organic and inorganic pollution which is not readily oxidized by biologica processes. Because the chemical oxygen demand can be determined quickly in comparison to the biochemical oxygen demand, the establishment of a correlation between the two parameters serves to reduce the number of the latter determinations required. The chemical demand results are nearly always higher than the biochemical demand.

## *Temperature*

Temperature is particularly important to conservation and industry. A few degrees elevation in temperature due to cooling water discharges may seriously limit the capacity of a stream to support fish life. Also, high water temperatures increase the cost of cooling water for industrial operations. Cooling towers and other equipment for handling cooling water must be engineered to the temperature levels normally encountered

These determinations include alkalinity, hydrogen-ion concentration (pH), hardness, chlorides, sulfates, and total dissolved solids. The pH indicates whether water is acidic or alkaline, corrosive or passive. Alkalinity is a measure of the neutralization reserve present, or the extent to which the water can resist a change from an alkaline to an acid condition upon addition of acidic chemicals. This information is important to the water treatment plant operator and to many other water users.

Hardness is not only a measure of the soap consuming property, but is also of importance in the treatment of boiler waters, where removal of hardness is one of the most important functions. Chloride, sulfate, and total dissolved solids add further information on the gross dissolved mineral content carried by the stream. These are of great importance when considering the taste or palatability of water. They are also important when the water is being demineralized for specific industrial processes, since the cost of demineralization is a direct function of the dissolved solids content of the water. In addition, waters of high saline content are less desirable and may at times even be unfit for municipal, irrigation, and other uses.

### *Turbidity*

Turbidity of water is due to the suspension of clay, silt, finely divided organic matter, microscopic organisms, and other similar materials. Its presence is of particular importance in water treatment processes and in the propagation of fish and other aquatic life.

### *Coliform Organisms*

Information regarding fecal pollution is essential to water quality measurements. Data on coliforms help to point up the trends in the effectiveness of control of domestic waste discharges.

The delayed incubation membrane filter technique is

tube (MPN) method. The latter would necessitate transport of water samples to the laboratory for examination, resulting in a time lapse between collection and examination which significantly changes the microbial content of the samples. Also, some of the many other bacteria present in raw water might overgrow or otherwise inhibit the demonstration of the coliforms. In the delayed incubation membrane filter procedure, the bacterial organisms are removed from the fluid sample immediately after collection and sent to the laboratory on a preservative medium. Thus, the resulting coliform count approaches very closely the actual number of coliform bacteria present in the water sample at the time of collection.

Unusual bacterial populations which are indicative of changes in water quality and may indicate sewage pollution may be reflected in National Water Quality Network data. During the 1961–62 water year, observations of this type have been made at Sioux Falls, S. Dak., where high coliform counts were traced to a leaking force main, and at Williston, N. Dak., where earth moving operations above the water intake caused high counts.

## Trace Elements and Other Determinations

This year's data include the examination of two series of composite samples of raw water from each station for the dissolved constituents likely to be present in trace quantities or whose significance does not warrant more frequent analysis. Twice during the year, 4-month composites of the weekly samples were prepared and subjected to analysis. Examinations covered those elements which were considered to have possible physiological or toxicological significance to biological life and for which a reliable method was available. As new methods are developed, other determinations will be included. The ultimate goal of this phase of the program will be to provide background data on all elements which may be found in water and which may be of significance in water quality management.

In carrying out the spectrographic examination, the sample is first passed through a membrane filter to remove all suspended matter. An aliquot of the sample is then taken, acidified with hydrochloric acid, and evaporated to a concentration containing 2 mg. of solids in 0.1 ml. of sample (20,000 ppm.). A .05-ml. portion of the concentrated sample is then placed on the electrode and arced to completion. Sample exposure is made through a stepped sector disc. The exposed plate is compared to a standard plate prepared under identical conditions.

Waters with low dissolved solids content can be concentrated to a greater degree than those having a high dissolved solids content, thus accounting for the apparently variable sensitivity shown in the tabulation. Values followed by an asterisk (*) show the limits of sensitivity at which the test was performed, and indicate that the ion being measured was not detected at that level. It is known that trace concentrations of many ions are subject to precipitation and adsorption on container surfaces during storage. This especially applies to iron and manganese which are particularly subject to oxidation and precipitation during storage. Hence, all the values reported by spectrographic method represent the quantity of the particular metal in solution at the time of analysis. It should be emphasized that the spectrographic analyses are semi-quantitative and represent an approximation of the actual value.

The measurements of potassium, sodium, fluoride, selenium and boron are performed according to flame or colorimetric procedures and are quantitative. The results, however, are rounded off to the significant figures reported.

The Cheng method, as given in Analytical Chemistry, *28*:1738(1956) was used for the selenium measurement. Fluoride examinations were made by the SPADNS procedure described by Bellack and Shouboe in Analytical Chemistry, 30:2032 (1958). Boron was measured by the curcumin procedure outlined in *Standard Methods for the Examination of Water and Wastewater*, Eleventh Edition, 1960.

# *Stream Flow*

Stream flow data have a most important role in the utilization of water quality parameters such as are included in this report. For this reason, average daily flow records are reported for most of the sampling stations in the Network.

All flow data included in this compilation are *provisional* data furnished by the agencies credited, and are subject to revision by such agencies prior to any final publication. With the exceptions mentioned below, the flows are given as furnished to the Public Health Service.

The data were generally furnished in units of cubic feet per second. In general only the first three digits were considered significant. Because of machine limitations the data are reported here in thousand cubic feet per second. Even though three zeros may appear after the decimal, no artificial accuracy of measurement is implied. Only the first three digits should be considered significant. There are two exceptions: (1) When the flow was over 1 million cubic feet per second, the first four digits are reported, and (2) at times when the Rio Grande flows were extremely low, the data were reported to tenths of a cubic foot per second. These figures are published showing 4 decimal places.

Flow data for sampling stations on the rivers of the Great Lakes system are reported as the monthly mean flow, as computed by the U.S. Lake Survey. In certain other rivers, flow data were computed by the Public Health Service from information supplied by the gauging agency. The methods of computations are shown as footnotes to the data for the applicable stations.

| STATION | MILES ABOVE MOUTH | DESCRIPTION | SAMPLED BY | FIELD ANALYSES BY | OTHER COOPERATING AGENCIES | STREAM FLOW RECORDS | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | NEAREST GAGING STATION | OPERATED BY | PERIOD OF RECORD |
| ALLEGHENY RIVER<br>at Pittsburgh, Pa. | 8 | Pittsburgh Filtration Plant Intake | Pittsburgh Dept. of Water | Pittsburgh Dept. of Water | Pennsylvania Dept. of Health | Natrona, Pa. | U.S. Geological Survey | 1938 to date |
| ANIMAS RIVER<br>at Cedar Hill, N. Mex. | 33 | Heizer Ranch at natural gas pipeline crossing | San Juan County Health Dept. | San Juan County Health Dept. | New Mexico Dept. of Public Health | near Cedar Hill, N. Mex. | U.S. Geological Survey | 1936 to date |
| APALACHICOLA RIVER<br>at Chattahoochee, Fla. | 105 | Jim Woodruff Dam Powerhouse | U.S. Army Corps of Engineers<br>Florida State Hospital Chattahoochee, Fla. | Florida State Hospital | Florida State Board of Health | Chattahoochee, Fla. | U.S. Geological Survey | 1928 to date |
| ARKANSAS RIVER<br>at Pendleton Ferry, Ark. | 45 | Ferry Landing, South Shore | Arkansas State Water Pollution Control Commission | Arkansas State Water Pollution Control Commission | Arkansas State Board of Health | Little Rock, Arkansas | U.S. Geological Survey | 1927 to date |
| near Ponca City, Okla. | 646 | Old U.S. Highway No.60 Bridge (formerly at Osage Station, Okla. Gas & Electric Co.) | Ponca City Water Dept. | Ponca City Water Dept.<br>U.S. Public Health Service | Oklahoma State Dept. of Health | Ralston, Oklahoma | U.S. Geological Survey | 1938 to date |
| at Coolidge, Kansas | 1,099 | U.S. Geological Survey Stream Gaging Station | U.S. Geological Survey | U.S. Public Health Service | Kansas State Board of Health<br>Colorado State Dept. of Health | near Coolidge, Kansas | U.S. Geological Survey | 1903, 1921<br>1950 to date |
| BEAR RIVER<br>above Preston, Idaho | 87 | at U.S. Highway 91 Bridge | Franklin County, Idaho Health Dept. | U.S. Public Health Service | Idaho State Dept. of Health<br>Idaho State Highway Dept. | Preston, Idaho | U.S. Geological Survey | 1943 to date |
| BIG HORN RIVER<br>at Hardin, Montana | 40 | at Water Plant Intake | Hardin Water Dept. | Hardin Water Dept. | Montana Dept. of Health | St. Xavier, Montana | U.S. Geological Survey | 1934 to date |
| BIG SIOUX RIVER<br>below Sioux Falls, S.D. | 158 | 1st bridge east of U.S. Hgwy. #229 below Sioux Falls | Sioux Falls Sewage Treatment Plant | Sioux Falls Sewage Treatment Plant | South Dakota Dept. of Health | Brandon, S. D. | U.S. Geological Survey | 1959 to date |
| CHATTAHOOCHEE RIVER<br>at Columbus, Georgia | 160 | Columbus Water Dept. Plant Intake | Columbus Water Dept. | Columbus Water Dept. | Georgia Dept. of Public Health | Columbus, Georgia | U.S. Geological Survey | 1929 to date |
| at Lanett, Alabama | 192 | West Point Manufacturing Co. Water Filter Plant Intake | West Point Manufacturing Company | West Point Manufacturing Company | Alabama State Dept. of Health<br>Alabama Water Improvement Commission | West Point, Georgia | U.S. Geological Survey | 1896-1910<br>1912 to date |

| STATION | MILES ABOVE MOUTH | DESCRIPTION | SAMPLED BY | FIELD ANALYSES BY | OTHER COOPERATING AGENCIES | STREAM FLOW RECORDS | |
|---|---|---|---|---|---|---|---|
| | | | | | | NEAREST GAGING STATION | OPERATED BY |
| CHATTAHOOCHEE RIVER (Cont'd)<br>at Atlanta, Georgia | 303 | Atlanta Water Dept. Plant Intake | Atlanta Water Dept. | Atlanta Water Dept. | Georgia Dept. of Public Health | Atlanta, Georgia | U.S. Geological Survey |
| CHENA SLOUGH<br>at Fairbanks, Alaska | 15 | at Ft. Wainwright Sewage Pump Plant | Fairbanks Municipal Utilities System | Fairbanks Municipal Utilities System | Alaska State Dept. of Health and Welfare<br>U.S. Army | Fairbanks, Alaksa | U.S. Geological Survey |
| CLEARWATER RIVER<br>at Lewiston, Idaho | 2 | Water Plant Intake | Lewiston Water Dept. | Lewiston Water Dept. | Idaho Dept. of Health | Spalding, Idaho | Washington Water Power Company |
| CLINCH RIVER<br>at Clinton, Tenn. | 36 | Water Plant Intake | Clinton Water Dept. | Clinton Water Dept. | Tennessee Dept. of Public Health | below Norris Dam | U.S. Geological Survey |
| above Kingston, Tenn. | 14 | at Gaseous Diffusion Plant Water Intake | Clinch River Study Commission | U.S. Public Health Service | Tennessee Dept. of Public Health<br>Tennessee Stream Pollution Control Commission | near Scarboro, Tennessee | U.S. Geological Survey |
| COLORADO RIVER<br>at Yuma, Arizona | 91 | Arizona Water Co. Intake | Arizona Water Co. | Arizona Water Co. | Arizona State Dept. of Health | below Yuma, Arizona | U.S. Geological Survey |
| above Parker Dam, Arizona-California | 258 | Aqueduct Intake, Metropolitan Water District of Southern California | Metropolitan Water District of Southern California | Metropolitan Water Distr. of Southern California<br>U.S. Public Health Service | California State Dept. of Health<br>California State Water Pollution Control Board | below Parker Dam | U.S. Geological Survey |
| near Boulder City, Nevada | 413 | Boulder City (Nevada) Water Plant Intake | Boulder City Water Dept. | Boulder City Water Dept. | Nevada State Dept. of Public Health<br>U.S. Bureau of Reclamation | below Hoover Dam | through U.S. Geological Survey<br>U.S. Bureau of Reclamation |
| at Page, Arizona | 775 | Page Water Plant Intake | U.S. Bureau of Reclamation | U.S. Bureau of Reclamation | Arizona State Dept. of Health<br>Utah State Dept. of Health | Lees Ferry, Arizona | U.S. Geological Survey |
| at Loma, Colorado | 1,150 | Pumping Station at E. R. Smith Farm | Mesa County (Colorado) Dept. of Public Health | Grand Junction (Colorado) Water Dept. | Colorado State Dept. of Public Health | near Colorado-Utah State Line | U.S. Geological Survey |

| STATION | MILES ABOVE MOUTH | DESCRIPTION | SAMPLED BY | FIELD ANALYSES BY | OTHER COOPERATING AGENCIES | STREAM FLOW RECORDS | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | NEAREST GAGING STATION | OPERATED BY | PERIOD OF RECORD |
| COLUMBIA RIVER | | | | | | | | |
| at Clatskanie, Oregon | 53 | Beaver Army Terminal<br>U.S. Army Transp., Supply & Maintenance Command | U.S. Army<br>U.S. Public Health Service | Oregon State Sanitary Authority<br>U.S. Public Health Service | | Clatskanie, Oregon* | U.S. Geological Survey | 1926 to date |
| at Bonneville, Oregon | 145 | Bonneville Dam Powerhouse | U.S. Army Corps of Engineers | Crown Zellerbach Corp. | Oregon State Sanitary Authority<br>Washington State Dept. of Health<br>Washington State Pollution Control Commission | Bonneville, Oregon* | U.S. Geological Survey | 1928 to date |
| at McNary Dam, Oregon | 292 | U.S. Army Engineer Project McNary Dam | U.S. Corps of Engineers<br>Washington State Pollution Control Commission | U.S. Geological Survey | Washington State Dept. of Health | below McNary Dam, Oregon | U.S. Geological Survey | 1951 to date |
| at Pasco, Washington | 327 | Municipal Water Plant Intake | Pasco Water Dept. | Pasco Water Dept. | Washington State Dept. of Health<br>Washington State Pollution Control Commission | Pasco, Washington* | U.S. Geological Survey | 1933 to date |
| at Wenatchee, Wash. | 465 | Plant Intake, Aluminum Co. of America | Aluminum Co. of America | Aluminum Co. of America | Washington State Dept. of Health<br>Washington State Pollution Control Commission | Trinidad, Washington | U.S. Geological Survey | 1913 to date |
| at Northport, Wash. | 730 | Washington State Highway #22 Bridge (carbon adsorption unit on East Bank - four miles downstream) | Interested citizens | U.S. Public Health Service | Washington State Dept. of Health<br>Washington State Pollution Control Commission | International Boundary | U.S. Geological Survey | 1937 to date |
| CONNECTICUT RIVER | | | | | | | | |
| below Northfield, Mass. | 138 | Central Vermont R.R. Bridge | Massachusetts State Dept. of Public Health | Massachusetts State Dept. of Public Health (Amherst Laboratory) | | Vernon, Vermont* | U.S. Geological Survey | 1936, 1938<br>1944 to date |
| at Enfield Dam, Conn. | 63 | on Windsor Lock at Dam | Connecticut Water Resources Commission | Connecticut Water Resources Commission | Connecticut Light and Power Company<br>Wesleyan University | Thompsonville, Conn. | U.S. Geological Survey | 1928 to date |
| at Wilder, Vermont | 186 | at Wilder Dam Power Plant | New England Power Company | U.S. Public Health Service | New Hampshire State Water Pollution Control Commission<br>Vermont Dept. of Water Resources | Connecticut River at White River Junction, Vt.<br>White River at West Hartford, Vt. | U.S. Geological Survey | 1911 to date<br>1915 to date |
| CUMBERLAND RIVER | | | | | | | | |
| at Clarksville, Tenn. | 120 | Clarksville Water Treatment Plant Intake | Clarksville Gas & Water Dept. | Clarksville Gas & Water Dept. | Tennessee Dept. of Public Health | Dover, Tennessee | U.S. Geological Survey | 1939 to date |

*Computed Data

| STATION | MILES ABOVE MOUTH | DESCRIPTION | SAMPLED BY | FIELD ANALYSES BY | OTHER COOPERATING AGENCIES | STREAM FLOW RECORDS | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | NEAREST GAGING STATION | OPERATED BY | PERIOD OF RECORD |
| DELAWARE RIVER<br>at Philadelphia, Pa. | 110 | Municipal Water Plant Intake (Torresdale Plant) | Philadelphia Water Dept. | Philadelphia Water Dept. | Pennsylvania State Dept. of Health | Trenton, New Jersey | U.S. Geological Survey | 1913 to date |
| at Trenton, N. J. | 136 | Water Works Intake | Trenton Water Department | Trenton Water Department | New Jersey Dept. of Public Health | Trenton Water Works Intake | U.S. Geological Survey | 1913 to date |
| at Martins Creek, Pa. | 191 | at Martins Creek Steam Electric Station | Pennsylvania Power & Light Company | Pennsylvania Power & Light Company | Pennsylvania State Dept. of Health | Belvidere, New Jersey | U.S. Geological Survey | 1922 to date |
| ESCAMBIA RIVER<br>at Century, Florida | 51 | Highway Bridge on State Route #4 | Florida State Board of Health | Florida State Board of Health | | near Century, Florida | U.S. Geological Survey | 1934 to date |
| GREAT LAKES<br>Lake Erie at Buffalo, New York | | Municipal Water Plant Intake | Buffalo Water Dept.<br>Erie County (N.Y.) Health Dept. | Erie County (N.Y.) Health Dept. | New York State Dept. of Health | Cleveland, Ohio (Water Stages only) | U.S. Lake Survey | 1900 to date |
| Detroit River at Detroit, Michigan | 29 | Municipal Water Plant Intake (Water Works Park) | Detroit Board of Water Commissioners | Detroit Board of Water Commissioners | Michigan State Dept. of Health<br>Michigan State Water Resources Commission | Detroit, Michigan | U.S. Lake Survey | 1936 to date |
| St. Clair River at Port Huron, Michigan | 38 | Municipal Water Plant Intake | City of Port Huron, Mich. | City of Port Huron, Mich. | Michigan State Dept. of Health<br>International Joint Commission<br>Michigan State Water Resources Board | Ft. Gratiot, Michigan | U.S. Lake Survey | 1900 to date |
| Lake Michigan at Gary, Indiana | - | Gary-Hobart Water Corp. Intake | Gary-Hobart Water Corp. | Gary-Hobart Water Corp. | Indiana State Board of Health | Milwaukee, Wisconsin (Water Stages only) | U.S. Lake Survey | 1905 to date |
| Lake Michigan at Milwaukee, Wisconsin | - | Muncipal Water Plant Intake | City of Milwaukee, Wisc. | City of Milwaukee, Wisc. | Wisconsin State Board of Health | Milwaukee, Wisconsin | U.S. Lake Survey | 1860 to date |
| St. Marys River at Sault Ste. Marie, Michigan | 48 | Municipal Water Plant Intake | Sault Ste. Marie Water Dept. | Sault Ste. Marie Water Dept. | Michigan State Dept. of Health | Sault Ste. Marie, Mich. | U.S. Lake Survey | 1900 to date |
| Lake Superior at Duluth, Minnesota | - | Municipal Water Plant Intake | Duluth Water, Gas & Sewage Treatment Dept. | Duluth Water, Gas & Sewage Treatment Dept. | Minnesota State Dept. of Health | Marquette, Michigan | U.S. Lake Survey | 1900 to date |
| GREEN RIVER<br>at Dutch John, Utah | 403 | below Flaming Gorge Dam | U.S. Bureau of Reclamation | U.S. Public Health Service | Utah Water Pollution Control Board | near Greendale, Utah | U.S. Geological Survey | 1942 to date |
| HUDSON RIVER<br>below Poughkeepsie, New York | 70 (est.) | International Business Machine Corp. Plant Intake | International Business Machine Corp. | International Business Machine Corp.<br>New York State Dept. of Health | New York State Dept. of Health | Green Island, New York | U.S. Geological Survey | 1946 to date |

| STATION | MILES ABOVE MOUTH | DESCRIPTION | SAMPLED BY | FIELD ANALYSES BY | OTHER COOPERATING AGENCIES | STREAM FLOW RECORDS | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | NEAREST GAGING STATION | OPERATED BY | PERIOD OF RECORD |
| ILLINOIS RIVER<br>near Grafton, Illinois | 10 | at Pere Marquette State Park Water Pump House | Illinois Department of Conservation | U.S. Public Health Service | Illinois Dept. of Public Health | Meredosia, Illinois | U.S. Geological Survey | 1938 to date |
| at Peoria, Illinois | 166 | Peoria Water Works Company Plant Intake | Peoria Water Works Company | Peoria Water Works Co. | Illinois Dept. of Public Health | Kingston Mines, Illinois | U.S. Geological Survey | 1939 to date |
| KANAWHA RIVER<br>at Winfield Dam, West Virginia | 30 | Winfield Dam Power Plant | West Virginia Water Resources Commission | West Virginia Water Resources Commission | Kanawha Valley Power Co.<br>West Virginia State Dept. of Health | Charleston, West Virginia | U.S. Geological Survey | 1939 to date |
| KLAMATH RIVER<br>near Keno, Oregon | 220 | below Big Bend Plant of California-Oregon Power Co. | California Oregon Power Co.<br>City of Klamath Falls, Oregon<br>Klamath County Health Dept. | Klamath Falls Sewage Treatment Plant | Oregon State Board of Health | below Big Bend Power Plant near Keno, Oregon | U.S. Geological Survey | 1904-1913<br>1930 to date |
| LITTLE MIAMI RIVER<br>at Cincinnati, Ohio | 2 | at Beechmont Levee and U.S. State Highway #125 | U.S. Public Health Service | U.S. Public Health Service | City of Cincinnati, Ohio<br>Ohio Dept. of Health | Milford, Ohio | U.S. Geological Survey | 1915 to date |
| MERRIMACK RIVER<br>above Lowell, Mass. | 42 | Old Municipal Water Plant Intake | Lowell Water Dept. | Massachusetts State Dept. of Health (Lawrence Experiment Station) | | below Concord River at Lowell, Massachusetts | U.S. Geological Survey | 1923 to date |
| MISSISSIPPI RIVER<br>at New Orleans, La. | 105 | Municipal Water Plant Intake | New Orleans Sewage and Water Board | Louisiana State Dept. of Health | Louisiana State Dept. of Health | Red River Landing, La. | U.S. Geological Survey | 1928 to date |
| at Vicksburg, Miss. | 431 | Municipal Water Plant Intake | Vicksburg Water Dept. | Vicksburg Water Dept. | La. State Dept. of Health<br>Miss. State Bd. of Health | Vicksburg, Mississippi | U.S. Geological Survey | 1931 to date |
| at Delta, Louisiana | 433 | River Landing, Delta Casting Yard, U.S. Corps of Engineers | Mississippi State Board of Health | Mississippi State Board of Health | Louisiana State Dept. of Health | Vicksburg, Mississippi | U.S. Geological Survey | 1931 to date |
| at West Memphis, Ark. | 726 | Barge Terminal, Oklahoma-Mississippi River Products Lines, Inc. | Memphis (Tennessee) Light, Gas & Water Division | Memphis (Tennessee) Light, Gas & Water Division | Arkansas State Board of Health<br>Tennessee Dept. of Public Health | Memphis, Tennessee | U.S. Geological Survey | 1934 to date |
| at Cape Girardeau, Mo. | 1,020 | Missouri Utilities Co. Water Intake | Missouri Utilities Co. | Missouri Utilities Co. | Missouri Dept. of Public Health<br>Missouri Water Pollution Board | Thebes, Illinois | U.S. Geological Survey | 1933-1938<br>1939 to date |
| at East St. Louis, Ill. | 1,166 | East St. Louis Water Co. Intake | East St. Louis Water Co. | East St. Louis Water Co. | Illinois State Dept. of Public Health | Alton, Illinois | U.S. Geological Survey | 1933-1938<br>1939 to date |
| at Burlington, Iowa | 1,369 | Municipal Water Plant Intake | Burlington Water Dept. | Burlington Water Dept. | Iowa State Dept. of Health | Keokuk, Iowa | U.S. Geological Survey | 1878 to date |

| STATION | MILES ABOVE MOUTH | DESCRIPTION | SAMPLED BY | FIELD ANALYSES BY | OTHER COOPERATING AGENCIES | STREAM FLOW RECORDS<br>NEAREST GAGING STATION | OPERATED BY | P |
|---|---|---|---|---|---|---|---|---|
| MISSISSIPPI RIVER (Cont'd)<br>at Dubuque, Iowa | 1,549 | U.S. Army Corps of Engineers Lock & Dam #11 | Dubuque Water Dept. | Dubuque Water Dept. | Iowa State Dept. of Health | McGregor, Iowa | U.S. Geological Survey | 193 |
| Lock & Dam #3 below St. Paul, Minn. | 1,757 | U.S. Army Corps of Engineers Lock & Dam #3 | U.S. Army Corps of Engineers, Minneapolis-St. Paul Sanitary Distr. | Minneapolis-St. Paul Sanitary District | Minnesota State Dept. of Health | Prescott, Wisconsin | U.S. Geological Survey | 192 |
| MISSOURI RIVER<br>at St. Louis, Missouri | 36 | Water Plant Intake, St. Louis County Water Co. and Howard Bend Plant, City of St. Louis | St. Louis County Water Company<br>St. Louis Water Dept. | St. Louis County Water Company<br>St. Louis Water Dept. | Missouri Dept. of Public Health<br>Missouri Water Pollution Board | Hermann, Missouri | U.S. Geological Survey | 189 |
| at Missouri City, Missouri | 351 | North West Electric Power Coop. Power Plant Intake | North West Electric Power Coop., Inc. | U.S. Public Health Service | Missouri Water Pollution Board<br>Missouri Dept. of Public Health | Kansas City, Missouri | U.S. Geological Survey | 189 |
| at Kansas City, Kansas | 385 | Municipal Water Plant Intake | Kansas City (Kansas) Board of Public Utilities | Kansas City (Kansas) Board of Public Utilities | Kansas State Board of Health | Kansas City, Missouri | U.S. Geological Survey | 1897 |
| at St. Joseph, Missouri | 471 | St. Joseph Water Co. Intake | St. Joseph Water Co. | St. Joseph Water Co. | Missouri Dept. of Public Health<br>Missouri Water Pollution Board | St. Joseph, Missouri | U.S. Geological Survey | 1927 |
| at Omaha, Nebraska | 642 | Metropolitan Utilities Distr. Water Plant Intake | Metropolitan Utilities District | Metropolitan Utilities District | Nebraska State Dept. of Health | Omaha, Nebraska | U.S. Geological Survey | 1928 |
| at Yankton, South Dakota | 841 | Municipal Water Plant Intake | Yankton Water Dept. | Yankton Water Dept. | South Dakota State Board of Health | Yankton, South Dakota | U.S. Geological Survey | 1930 |
| at Bismarck, North Dakota | 1,377 | Municipal Water Plant Intake | Bismarck Water Dept. | Bismarck Water Dept.<br>North Dakota State Dept. of Health |  | Bismarck, North Dakota | U.S. Geological Survey | 1927 |
| at Williston, North Dakota | 1,644 | Municipal Water Plant Intake | Williston Water Dept. | Williston Water Dept. | North Dakota State Dept. of Health | near Williston, North Dakota | U.S. Geological Survey | 1928 |
| MONONGAHELA RIVER<br>at Pittsburgh, Pa. | 4 | Hayes Mine Filter Plant | South Pittsburgh Water Co. | South Pittsburgh Water Co. | Pennsylvania State Dept. of Health | Braddock, Pa. | U.S. Geological Survey | 1934 |
| NORTH PLATTE RIVER<br>above Henry, Nebraska | 182 (est.) | Nebraska State Highway #86 Bridge near Scottsbluff | West Nebraska Branch Lab. of Nebraska State Dept. of Health | West Nebraska Branch Laboratory of the Nebraska State Dept. of Health |  | [illegible] | U.S. Geological Survey | 1929 |

| STATION | MILES ABOVE MOUTH | DESCRIPTION | SAMPLED BY | FIELD ANALYSES BY | OTHER COOPERATING AGENCIES | STREAM FLOW RECORDS | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | NEAREST GAGING STATION | OPERATED BY | PERIOD OF RECORD |
| OHIO RIVER | | | | | | | | |
| at Cairo, Illinois | 3 | Cairo Water Co. Intake | Cairo Water Co. | Cairo Water Co. | Illinois State Dept. of Public Health | Metropolis, Illinois | U.S. Geological Survey | 1934 to date |
| at Evansville, Indiana | 190 | Municipal Water Plant Intake | Evansville Water Dept. | Evansville Water Dept. | Indiana State Board of Health | Evansville, Indiana | U.S. Geological Survey | 1936 to date |
| at Louisville, Kentucky | 370 | Louisville Water Co. Filter Plant Intake | Louisville Water Co. | Louisville Water Co. | | Louisville, Kentucky | U.S. Geological Survey | 1928 to date |
| at Cincinnati, Ohio | 518 | Municipal Water Plant Intake | Cincinnati Water Dept. | Cincinnati Water Dept. | Ohio State Dept. of Health | Cincinnati, Ohio | U.S. Geological Survey | 1936 to date |
| at Huntington, West Virginia | 677 | Huntington Water Corp. Intake | Huntington Water Corp. | Huntington Water Corp. | West Virginia State Dept. of Health | Huntington, West Virginia | U.S. Geological Survey | 1934 to date |
| below Addison, Ohio | 723 | Kyger Creek Plant of Ohio Valley Electric Corp. | Ohio Valley Electric Corp. | Ohio Valley Electric Corp. | Ohio Department of Health | Pomeroy, Ohio | U.S. Geological Survey | 1955 to date |
| at East Liverpool, Ohio | 941 | Municipal Water Plant Intake | East Liverpool Water Dept. | East Liverpool Water Dept. | Ohio State Dept. of Health | Sewickley, Pennsylvania | U.S. Geological Survey | 1933 to date |
| OUACHITA RIVER | | | | | | | | |
| at Bastrop, Louisiana | 215 | River Bank Seven Miles west of Bastrop, La. | Louisiana Wildlife & Fisheries Commission | Louisiana Wildlife & Fisheries Commission | Louisiana Stream Control Commission<br>Louisiana State Board of Health | near Arkansas-Louisiana State Line | U.S. Geological Survey | 1958 to date |
| PEND OREILLE RIVER | | | | | | | | |
| at Albeni Falls Dam, Idaho | 90 | Albeni Falls Dam Power House | U.S. Army Corps of Engineers | U.S. Public Health Service | Washington State Dept. of Health<br>Idaho State Board of Health | at Newport, Washington | U.S. Geological Survey | 1903-1941<br>1952 to date |
| PLATTE RIVER | | | | | | | | |
| above Plattsmouth, Nebraska | 2 | at U.S. Highway #73 Bridge | Nebraska State Dept. of Health<br>City of Plattsmouth | Nebraska State Dept. of Health | | South Bend, Nebraska | U.S. Geological Survey | 1953 to date |
| POTOMAC RIVER | | | | | | | | |
| at Great Falls, Md. | 126 | Washington, D.C. Water Plant Intake | U.S. Army Corps of Engineers | U.S. Army Corps of Engineers | Maryland State Dept. of Health | near Washington, D.C. | U.S. Geological Survey | 1930 to date |
| at Williamsport, Md. | 212 | Hagerstown Municipal Water Plant Intake | Hagerstown Water Dept. | Hagerstown Water Dept. | Maryland State Dept. of Health | Williamsport, Maryland * | U.S. Geological Survey | 1928 to date |
| RAINY RIVER | | | | | | | | |
| at International Falls, Minnesota | 70 | Minnesota & Ontario Paper Company Water Intake | Minnesota & Ontario Paper Company | Minnesota & Ontario Paper Company | Minnesota State Dept. of Health | International Falls, Minnesota | International Joint Commission | 1962 to date |
| at Baudette, Minnesota | 9 | Intake at east end of wooden pier of Canadian National Railroad Bridge | Baudette Light & Power Dept. | U.S. Public Health Service | Minnesota State Dept. of Health | Manitou Rapids, Minnesota | U.S. Geological Survey | July, 1928 to date |

*Computed Data

| STATION | MILES ABOVE MOUTH | DESCRIPTION | SAMPLED BY | FIELD ANALYSES BY | OTHER COOPERATING AGENCIES | STREAM FLOW RECORDS | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | NEAREST GAGING STATION | OPERATED BY | PERIO RECO |
| RARITAN RIVER<br>at Perth Amboy, N. J. | 2 | New Jersey Highway #35 Bridge | U.S. Public Health Service | U.S. Public Health Service | New Jersey Dept. of Health | Bound Brook, New Jersey | U.S. Geological Survey | 1903-1909<br>1945 to |
| RED RIVER (North)<br>at Grand Forks, North Dakota | 296 | Municipal Water Plant Intake | Grand Forks City Water Dept. | Grand Forks City Water Dept. | North Dakota State Dept. of Health | Grand Forks, North Dakota | U.S. Geological Survey | 1901-1957 |
| RED RIVER (South)<br>at Alexandria, Louisiana | 122 | on pier of Alexandria-Pineville Expressway Bridge | Alexandria Water Dept. | Louisiana State Dept. of Health, Alexandria Laboratory | Louisiana State Dept. of Health | Alexandria, Louisiana | Mississippi River Comm.<br>U.S. Army Corps of Engineers | 1928-1938<br>1938 to |
| at Bossier City, La. | 312 | at Water Plant Intake | Bossier City Water Department | Bossier City Water Department | Louisiana State Board of Health<br>Louisana Stream Control Commission | Shreveport, Louisiana | U.S. Geological Survey | 1928 to |
| at Index, Arkansas | 485 | U.S. Highway #71 Bridge | U.S. Public Health Service<br>Arkansas State Water Pollution Control Commission | Arkansas State Water Pollution Control Commission | Arkansas State Board of Health | Index, Arkansas | U.S. Geological Survey | 1936 to |
| at Denison, Texas | 726 | Denison Dam Power House | U.S. Army Corps of Engineers | Denison Water Dept. | Texas State Dept. of Health | Colbert, Oklahoma | U.S. Army Corps of Engineers | 1923 to |
| RIO GRANDE<br>at Brownsville, Texas | 40 | Brownsville Filtration Plant Plant #1 Intake | Brownsville Water Dept. | Brownsville Water Dept. | Texas State Dept. of Health | Lower Brownsville, Texas * | International Boundary & Water Commission | 1934 to |
| at Laredo, Texas | 356 | Municipal Water Plant Intake | Laredo Water Dept. | Laredo Water Dept. | Texas State Dept. of Health | Laredo, Texas | International Boundary &Water Commission | 1923 to |
| at El Paso, Texas | 1,234 | Municipal Water Plant Intake | El Paso Public Service Board | El Paso Public Service Board | Texas State Dept. of Health | below Caballo Dam, New Mexico | U.S. Bureau of Reclamation | 1938 to |
| below Alamosa, Colo. | 1,755 | below Alamosa at State Highway #142 Bridge | Colorado State Dept. of Public Health | Colorado State Dept. of Public Health | | near Lobatos, Colorado | U.S. Geological Survey | 1953 to |
| ROANOKE RIVER<br>at John H. Kerr Reservoir & Dam, Virginia | 151 | at John H. Kerr Dam and Reservoir | U.S. Army Corps of Engineers | U.S. Army Corps of Engineers | Virginia State Water Control Board | Buggs Island, Virginia | U.S. Geological Survey | 1953 to |
| SABINE RIVER<br>near Ruliff, Texas | 40 | Sabine River Authority Pumping Plant | Sabine River Authority | U.S. Public Health Service | U.S. Geological Survey<br>Texas State Dept. of Health | near Ruliff, Texas | U.S. Geological Survey | 1924 to |

*Computed Data

| STATION | MILES ABOVE MOUTH | DESCRIPTION | SAMPLED BY | FIELD ANALYSES BY | OTHER COOPERATING AGENCIES | STREAM FLOW RECORDS | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | NEAREST GAGING STATION | OPERATED BY | PERIOD OF RECORD |
| SACRAMENTO RIVER at Green's Landing above Courtland, Calif. | 31 | Bureau of Reclamation Instrument House | California Department of Water Resources | California Department of Water Resources | California State Department of Health | Snodgrass Slough | California Department of Water Resources | 1939 to date |
| ST. LAWRENCE RIVER at Massena, New York | 422 | Aluminum Foundry Plant Intake | Chevrolet Motor Div. General Motors Corp. Aluminum Foundry | Chevrolet Motor Div. General Motors Corp. Aluminum Foundry | New York State Dept. of Health | International Rapids Section (St. Lawrence Power Pool) | U.S. Army Corps of Engineers | 1860 to date |
| SAN JOAQUIN RIVER near Vernalis Calif. | 67 | Bureau of Reclamation Instrument House | California Department of Water Resources | California Department of Water Resources | California State Department of Health | Vernalis, California | U.S. Geological Survey | 1922 to date |
| SAN JUAN RIVER at Shiprock, New Mexico | 208 | at U.S. Bureau of Mines Helium Plant Water Intake | San Juan County Health Dept. | San Juan County Health Dept. | New Mexico Dept. of Public Health | Shiprock, New Mexico | U.S. Geological Survey | 1912 to date |
| SAVANNAH RIVER at Port Wentworth, Georgia | 22 | State Highway #17 Bridge | U. S. Army Corps of Engineers | Union Bag-Camp Paper Co. | Chatham County, Georgia, Health Department<br>Ga. State Dept. of Public Health | near Clyo, Georgia | U.S. Geological Survey | 1930, 1933<br>1937 to date |
| at North Augusta, South Carolina | 217 | Municipal Water Plant Intake | North Augusta Water Dept. | North Augusta Water Dept. | South Carolina State Dept. of Health | Augusta, Georgia | U.S. Geological Survey | 1898-1906<br>1927-1931<br>1938 to date |
| SCHUYLKILL RIVER at Philadelphia, Pa. | 10 | Municipal Water Plant Intake | Philadelphia Water Dept. | Philadelphia Water Dept. | Pennsylvania Dept. of Health | Philadelphia, Pennsylvania | U.S. Geological Survey | 1931 to date |
| SHENANDOAH RIVER at Berryville, Virginia | 22 | Corps of Engineers Pumping Station near Berryville, Virginia | U.S. Army Corps of Engineers | U.S. Army Corps of Engineers | Virginia State Water Control Board | Millville, West Virginia | U.S. Geological Survey | 1928 to date |
| SHIP CREEK at Anchorage, Alaska | 11 | City of Anchorage Water Treatment Plant | Greater Anchorage Health District | U.S. Public Health Service | Alaska Department of Health and Welfare | Anchorage, Alaska | U.S. Geological Survey | 1956 to date |
| SNAKE RIVER at Ice Harbor Dam, Wash. | 12 | at Ice Harbor Dam Power Plant | U.S. Army Corps of Engineers | U.S. Public Health Service | Washington State Department of Health<br>Washington State Pollution Control Commission | near Clarkston, Washington | U.S. Geological Survey | 1915 to date |

| STATION | MILES ABOVE MOUTH | DESCRIPTION | SAMPLED BY | FIELD ANALYSES BY | OTHER COOPERATING AGENCIES | STREAM FLOW RECORDS | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | NEAREST GAGING STATION | OPERATED BY | PERIOD OF RECORD |
| SNAKE RIVER (Cont'd)<br>at Wawawai, Washington | 111 (est.) | Pumping station at I.E. Wilson Farm | Washington State University | Washington State University | Washington State Dept. of Health | near Clarkston, Washington | U.S. Geological Survey | 1915 to date |
| at Payette, Idaho | 368 | Water Plant Intake | Payette Water Department | Idaho State Dept. of Health | Idaho State Dept. of Health | Weiser, Idaho | U.S. Geological Survey | 1911 to date |
| SOUTH PLATTE RIVER<br>at Julesburg, Colorado | 87 | at Julesburg Sewage Treatment Plant | Northeast Colorado Health Dept. | Northeast Colorado Health Dept. | Colorado State Dept. of Health | Julesburg, Colorado | State of Colorado Dept. of Water Resources | 1902-1906<br>1908-1921<br>1925 to date |
| SPOKANE RIVER<br>at Post Falls Dam, Idaho | 94 | at Post Falls Dam Power Plant | Washington Water Power Company | U.S. Public Health Service | Washington State Dept. of Health<br>Idaho State Dept. of Health | Post Falls, Idaho | U.S. Geological Survey | 1913 to date |
| SUSQUEHANNA RIVER<br>at Conowingo, Maryland | 10 | Conowingo Hydro Electric Plant, Conowingo Dam | Baltimore Bureau of Water Supply<br>Philadelphia Electric Co. | Baltimore Bureau of Water Supply | Maryland State Dept. of Health | Marietta, Pennsylvania | U.S. Geological Survey | 1931 to date |
| at Sayre, Pennsylvania | 286 | Sayre Water Co. Plant Intake | Sayre Water Company | Sayre Water Company | Pennsylvania Dept. of Health | near Waverly, New York | U.S. Geological Survey | 1937 to date |
| TENNESSEE RIVER<br>at Pickwick Landing, Tennessee | 207 | at Pickwick Landing Dam Power House | Hardin County, Tennessee Health Department | U.S. Public Health Service | Tennessee Stream Pollution Control Commission<br>Tennessee Dept. of Public Health | Savannah, Tennessee | Tennessee Valley Authority | 1930 to date |
| at Bridgeport, Alabama | 408 | at TVA Widows Creek Steam Electric Plant | Stream Pollution Control Section Tennessee Valley Authority | TVA Stream Pollution Laboratory | | Hales Bar, near Chattanooga, Tenn. | U.S. Geological Survey | 1930 to date |
| at Chattanooga, Tennessee | 467 (est.) | City Water Company Intake | City Water Company of Chattanooga | City Water Company of Chattanooga<br>Tennessee Valley Authority | Tennessee Dept. of Public Health | Chattanooga, Tennessee | U.S. Geological Survey | 1874-1913<br>1915-1930<br>1936 to date |
| at Lenoir City, Tenn. | 565 | at Pumphouse Intake | Lenoir City Water Utilities Board | Lenoir City Water Utilities Board | Tennessee Dept. of Public Health<br>Tennessee Stream Pollution Control Commission | Ft. Loudon Dam, Tenn.<br>Little Tennessee River near McGee, Tenn. | Tennessee Valley Authority | 1943 to date<br>1904 to date |
| TOMBIGBEE RIVER<br>below Columbus, Mississippi | 368 | at YMCA Camp Pratt, 11 miles south of Columbus, Miss. | Lowndes County Health Dept. | Lowndes County Health Dept. | Mississippi State Board of Health | Columbus, Mississippi<br>Steens, Mississippi | U.S. Geological Survey<br>U.S. Geological Survey | 1918 to date<br>1939 to date |

| STATION | MILES ABOVE MOUTH | DESCRIPTION | SAMPLED BY | FIELD ANALYSES BY | OTHER COOPERATING AGENCIES | STREAM FLOW RECORDS | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | NEAREST GAGING STATION | OPERATED BY | PERIOD OF RECORD |
| TRUCKEE RIVER<br>at Farad, California below California-Nevada Border | 82 | at Farad Power Station of Sierra Pacific Power Co. | California Dept. of Water Resources<br>Nevada County, California, Health Department | California Department of Water Resources | Sierra Pacific Power Co.<br>California Dept. of Public Health | Farad, California | U.S. Geological Survey | 1900-1909<br>1938 to date |
| VERDIGRIS RIVER<br>at Nowata, Okla. | 150 | Water Plant Intake | Nowata Water Department | Nowata Water Department | Oklahoma State Dept. of Health | Lenapha, Oklahoma | U.S. Army Corps of Engineers | 1939 to date |
| WABASH RIVER<br>at New Harmony, Ind. | 52 | U.S. Highway #460 Bridge | White County, Illinois, Bridge Commission<br>Indiana State Board of Health | Indiana State Board of Health | | Mount Carmel, Illinois | U.S. Geological Survey | 1927 to date |
| WILLAMETTE RIVER<br>at Portland, Oregon | 8 | at Swan Island in Portland Harbor | U.S. Public Health Service | U.S. Public Health Service | Oregon State Board of Health | Salem, Oregon | U.S. Geological Survey | 1909 to date |
| YAKIMA RIVER<br>at Richland, Washington | 5 | Richland Municipal Water Intake | City of Richland, Washington | Richland Water Dept. | Washington State Board of Health<br>Washington Pollution Control Commission | Kiona, Washington | U.S. Geological Survey | 1896-1915<br>1933-1950<br>1959 to date |
| YELLOWSTONE RIVER<br>near Sidney, Montana | 30 | Intake - Lewis & Clark Station, Montana-Dakota Utilities Co. | Montana-Dakota Utilities Company | Montana-Dakota Utilities Company | Montana State Board of Health | near Sidney, Montana | U.S. Geological Survey | 1934 to date |

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# *Explanation of Analytical Data*

## *Radioactivity Determinations*

In evaluating radioactivity data it should be noted that the reported errors represent counting errors only and the reported values are subject to other errors commonly associated with gross radioactivity analysis. (See Reference 17.)

A dash (—) in the count column signifies that no determination was made. An asterisk (*) following date of sample indicates that determinations are for composites of two or more samples taken on and before the date shown.

*Strontium 90* determinations are reported in micromicrocuries per liter as measured from total solids in the sample composited for the quarter. A dash (—) indicates that no determination was made in that period.

## *Plankton Population*

Plankton data are reported on two pages. The first page lists the population size of various groups of algae. A coded number shows the ten most abundant genera of algae and their count level. Code numbers used are identified on page 32. Blank spaces on the data sheets signify that counts of other genera were below a level of 150 per ml. The second page of plankton data lists the four dominant diatom species and their occurrence as a percent of the total diatom population. The percent of occurrence of all other diatom species is shown in the next column. Identification codes of species are given on page 33.

The detectable numbers per ml. of fungi, sheathed bacteria and protozoa are shown in the next two columns. The rotifer and crustacea totals per liter are listed together with the genera where these occurred at a count level of five or more per liter for rotifers and three or more per liter for crustacea. Nematode and miscellaneous animal form counts per liter appear in the last two columns.

A dash (—) indicates that no analysis was made. A zero count of each group is indicated by "0". Blank spaces under abundance and dominance columns indicate that the populations were too few to be included or were absent. Coding for abundant genera of rotifer and crustacea population levels are presented on page 34.

# PLANKTON POPULATION

## Identification Codes of Algae Genera and Count Levels of Most Abundant Genera

### KEY TO COUNT LEVEL (per ml.)

1 150 to 300
2 301 to 600
3 601 to 1,200
4 1,201 to 2,400
5 2,401 to 4,800
6 4,801 to 9,600
7 9,601 to 19,200
8 19,201 to 38,400
9 38,401 and over

### Code to ALGAE GENERA (Producers)

*Blue-green Algae*

01 Agmenellum (Merismopedia)
02 Anacystis (Microcystis)
03 Anacystis
04 Coccochloris
05 Gomphosphaeria
06, 07, 08 Reserve
09 Other genus
10 Other genus

*Filamentous blue-greens*

11 Anabaena
12 Aphanizomenon
13 Arthrospira
14 Lyngbya
15 Oscillatoria
16 Phormidium
17 Raphidiopsis
18 Spirulina
19, 20, 21 Reserve
22 Other genus
23 Other genus

*Coccoid green algae*

24 Actinastrum
25 Ankistrodesmus
26 Chlorella-type
27 Chlorococcum
28 Closterium
29 Coelastrum
30 Crucigenia
31 Dictyosphaerium
32 Golenkinia
33 Lagerheimia
34 Micractinium
35 Oocystis
36 Palmellococcus
37 Pediastrum
38 Scenedesmus
39 Staurastrum
40 Tetradesmus
41 Tetrastrum
42, 43 Reserve
44 Other genus
45 Other genus

*Filamentous green algae*

46 Cladophora
47 Stichococcus
48 Stigeoclonium
49 Reserve
50 Other genus

*Green flagellates*

51 Chlamydomonas including Carteria
52 Euglena
53 Lepocinclis
54 Pandorina
55 Phacotus
56 Phacus
57 Trachelomonas
58 Reserve
59 Other genus

*Other pigmented flagellates*

60 Chromulina
61 Dinobryon
62 Gymnodinium
63 Peridinium
64 Reserve
65 Other genus

*Diatoms*
*(with chromatophores)*

Centric

66 Biddulphia
67 Coscinodiscus
68 Cyclotella
69 Melosira
70 Rhizosolenia
71 Stephanodiscus
72 Other genus

Pennate

73 Achnanthes
74 Amphiprora
75 Amphora
76 Anomoeoneis
77 Asterionella
78 Caloneis
79 Cocconeis
80 Cymatopleura
81 Cymbella
82 Diatoma
83 Diploneis
84 Fragilaria
85 Gomphonema
86 Gyrosigma
87 Navicula
88 Nitzschia
89 Pleurosigma
90 Rhoicosphenia
91 Surirella
92 Synedra
93 Tabellaria
94, 95, 96 Reserve
97 Other genus
98 Other genus
99 Other genus

# PLANKTON POPULATION

## Identification Code for Diatom Species

| NO. | SPECIES |
|---|---|
| 01 | Achnanthes lanceolata |
| 02 | Achnanthes minutissima |
| 03 | Achnanthes sp. |
| 04 | Amphiprora paludosa |
| 05 | Amphiprora sp. |
| 06 | Amphora ovalis |
| 07 | Amphora sp. |
| 08 | Anomoeoneis exilis |
| 09 | Asterionella formosa |
| 10 | Bacillaria paradoxa |
| 11 | Biddulphia laevis |
| 12 | Caloneis amphisbaena |
| 13 | Caloneis sp. |
| 14 | Ceratoneis arcus |
| 15 | Cocconeis pediculus |
| 16 | Cocconeis placentula |
| 17 | Cocconeis sp. |
| 18 | Coscinodiscus rothii |
| 19 | Coscinodiscus (brackish) |
| 20 | Coscinodiscus sp. |
| 21 | Cymatopleura solea |
| 22 | Cymatosira belgica |
| 23 | Cyclotella atomus |
| 24 | Cyclotella comta |
| 25 | Cyclotella kutzingiana |
| 26 | Cyclotella meneghiniana |
| 27 | Cyclotella pseudostelligera |
| 28 | Cyclotella stelligera |
| 29 | Cyclotella striata |
| 30 | Cyclotella sp. |
| 31 | Cymbella ventricosa |
| 32 | Cymbella tumida |
| 33 | Cymbella sp. |
| 34 | Denticula sp. |
| 35 | Diatoma elongatum |
| 36 | Diatoma vulgare |
| 37 | Diatoma sp. |
| 38 | Diploneis smithii |
| 39 | Diploneis sp. |
| 40 | Epithemia turgida |
| 41 | Epithemia sorex |
| 42 | Epithemia sp. |
| 43 | Eunotia sp. (first) |
| 44 | Eunotia sp. (second) |
| 45 | Fragilaria capucina |
| 46 | Fragilaria construens |
| 47 | Fragilaria crotonensis |
| 48 | Fragilaria pinnata |
| 49 | Fragilaria sp. |
| 50 | Frustulia sp. |
| 51 | Gomphonema olivaceum |
| 52 | Gomphonema sp. |
| 53 | Gyrosigma kutzingii |
| 54 | Gyrosigma sp. |
| 55 | Hantzchia amphioxys |
| 56 | Melosira ambigua |
| 57 | Melosira distans var. alpigena |
| 58 | Melosira granulata |
| 59 | Melosira binderana |
| 60 | Melosira islandica |
| 61 | Melosira italica |
| 62 | Melosira varians |
| 63 | Meridion circulare |
| 64 | Navicula cryptocephala |
| 65 | Navicula sp. (first) |
| 66 | Navicula sp. (second) |
| 67 | Nitzschia acicularis |
| 68 | Nitzschia tryblionella |
| 69 | Nitzschia denticula |
| 70 | Nitzschia (Lancelolatae group) |
| 71 | Nitzschia sp. (first) |
| 72 | Nitzschia sp. (second) |
| 73 | Opephora martyi |
| 74 | Pinnularia sp. |
| 75 | Pleurosigma delicatulum |
| 76 | Rhoicosphenia curvata |
| 77 | Rhizosolenia eriensis |
| 78 | Rhopalodia gibba |
| 79 | Rhopalodia sp. |
| 80 | Stephanodiscus astraea var. minutula |
| 81 | Stephanodiscus dubius |
| 82 | Stephanodiscus hantzschii |
| 83 | Stephanodiscus niagarae |
| 84 | Stephanodiscus sp. |
| 85 | Surirella brightwelli |
| 86 | Surirella ovata |
| 87 | Surirella striatula |
| 88 | Surirella sp. |
| 89 | Synedra acus |
| 90 | Synedra pulchella |
| 91 | Synedra nana |
| 92 | Synedra ulna |
| 93 | Synedra vaucheriae |
| 94 | Synedra sp. |
| 95 | Tabellaria fenestrata |
| 96 | Tabellaria flocculosa |
| 97 | Any entity not found above (first) |
| 98 | Any entity not found above (second) |
| 99 | Reserved for future entity |
| xx | Insignificant or population inadequate |

# PLANKTON POPULATION

## Identification Codes of Microinvertebrate Genera and Count Levels of Most Abundant Genera

### Genera of ROTIFERS Key to counts per liter

| | |
|---|---|
| 1 | 5 to 10 |
| 2 | 11 to 20 |
| 3 | 21 to 40 |
| 4 | 41 to 80 |
| 5 | 81 to 160 |
| 6 | 161 to 320 |
| 7 | 321 to 640 |
| 8 | 641 to 1,680 |
| 9 | 1,681 and over |

### Genera of CRUSTACEA Key to counts per liter

| | |
|---|---|
| 1 | 3 to 5 |
| 2 | 6 to 10 |
| 3 | 11 to 20 |
| 4 | 21 to 40 |
| 5 | 41 and over |

### Code to MICROINVERTEBRATES

*Rotifers*

| | |
|---|---|
| 01 | Asplanchna |
| 02 | Brachionus (also Platyias) |
| 03 | Collotheca |
| 04 | Cephalodella |
| 05 | Chromogaster |
| 06 | Euchlanis |
| 07 | Filinia |
| 08 | Gastropus |
| 09 | Hexarthra (also Pedalia) |
| 10 | Kellicottia |
| 11 | Keratella |
| 12 | Lepadella |
| 13 | Monostyla (also Lecane) |
| 14 | Notholca |
| 15 | Philodina and similar contracted bdelloids |
| 16 | Ploesoma |
| 17 | Polyarthra |
| 18 | Pompholyx |
| 19 | Proales |
| 20 | Rotaria |
| 21 | Synchaeta |
| 22 | Trichocerca |
| 23 | to 45 Reserve |
| 46 | Other genus |
| 47 | Other genus |
| 48 | Other genus |
| 49 | Other genus |

*Cladocerans*

| | |
|---|---|
| 50 | Nauplii |
| 51 | Bosmina and related genera |
| 52 | Daphnia and related genera |
| 53 | Moina |
| 54 | Polyphemus |
| 55 | to 72 Reserve |
| 73 | Other genus |
| 74 | Other genus |
| 75 | Other genus |

*Copepods*

| | |
|---|---|
| 76 | Cyclops, Euclops, and Paracyclops |
| 77 | Diaptomus |
| 78 | to 97 Reserve |
| 98 | Other genus |
| 99 | Other genus |

Blank—Insignificant or population inadequate

## *Organic Chemicals*

The data relating to extractables are in micrograms per liter or parts per billion. Zeros when reported have been entered. A dash indicates that the respective results were not reported. An asterisk in the column showing end of sample date indicates that the determinations are for composited samples taken on and before the date shown. The extent of compositing can be determined by examining the gallons filtered, which is the sum of the applicable individual samples immediately above it.

## *Chemical, Physical and Bacteriological Analyses*

The data entered in each column are as reported. A dash signifies that the particular test was not performed. Zeros when meaningful have been entered. An asterisk preceding a number should be read as "less than" the number following it.

## *Trace Elements and Other Determinations*

For a discussion of the sensitivity limits of the determinations performed with spectrographic methods, see page 17.

## ERRATA

## COLIFORM ORGANISMS

Erroneously reported coliform data for the Colorado River at Loma, Colo., have appeared in previous Annual Compilations, for all dates since May 26, 1958. In using these previously published data, all coliform results cited for Loma should be multiplied by a factor of 100.

# *Analytical and Flow Data*

687-228 O-63—4

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** PENNSYLVANIA

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** ALLEGHENY RIVER

**STATION LOCATION** ALLEGHENY RIVER AT
PITTSBURGH, PENNSYLVANIA 79

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| O. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 0 | 4 | 61 | 10 | 14 | 0 | 1 | 0 | 1 | 0 | 1 | 16 | 8 | 26 | 10 | 42 | 13 | | | | | | |
| 0 | 11 | 61 | 10 | 27 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 7 | 15 | 10 | 16 | 12 | | | | | | |
| 0 | 18 | 61 | 11 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 8 | 13 | 11 | 13 | 13 | | | | | | |
| 0 | 25 | 61 | 11 | 6 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 9 | 16 | 10 | 16 | 13 | | | | | | |
| 1 | 1 | 61 | 11 | 15 | 0 | 1 | 0 | 2 | 0 | 2 | 2 | 8 | 15 | 11 | 17 | 13 | | | | | | |
| 1 | 8 | 61 | 11 | 21 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 8 | 12 | 10 | 12 | 13 | | | | | | |
| 2 | 21 | 62 | 3 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 4 | 16 | 5 | 19 | 6 | | | | | | |
| 2 | 28 | 62 | 3 | 13 | 0 | 1 | 0 | 1 | 0 | 1 | 32 | 5 | 28 | 6 | 60 | 7 | | | | | | |
| 3 | 7 | 62 | 3 | 20 | - | - | - | - | - | - | 30 | 6 | 26 | 7 | 56 | 9 | | | | | | |
| 3 | 14 | 62 | 3 | 28 | 0 | 1 | 0 | 1 | 0 | 1 | 28 | 5 | 19 | 5 | 47 | 7 | | | | | | |
| 3 | 21 | 62 | 4 | 3 | - | - | - | - | - | - | 28 | 6 | 24 | 7 | 52 | 9 | | | | | | |
| 3 | 28 | 62 | 4 | 9 | 0 | 1 | 0 | 1 | 0 | 1 | 20 | 5 | 12 | 5 | 32 | 7 | | | | | | |
| 4 | 4 | 62 | 4 | 19 | - | - | - | - | - | - | 40 | 7 | 10 | 6 | 50 | 9 | | | | | | |
| 4 | 11 | 62 | 4 | 27 | - | - | - | - | - | - | 0 | 6 | 10 | 6 | 10 | 8 | | | | | | |
| 4 | 18 | 62 | 5 | 1 | - | - | - | - | - | - | 0 | 5 | 3 | 6 | 3 | 7 | | | | | | |
| 4 | 25 | 62 | 5 | 28 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 7 | 4 | 8 | 7 | 11 | | | | | | |
| 5 | 2 | 62 | 6 | 25 | - | - | - | - | - | - | 2 | 5 | 8 | 5 | 10 | 7 | | | | | | |
| 5 | 9 | 62 | 7 | 11 | - | - | - | - | - | - | 2 | 5 | 5 | 7 | 7 | 9 | | | | | | |
| 5 | 16 | 62 | 6 | 25 | - | - | - | - | - | - | 2 | 3 | 7 | 4 | 9 | 5 | | | | | | |
| 5 | 23 | 62 | 6 | 27 | - | - | - | - | - | - | 5 | 7 | 15 | 8 | 20 | 11 | | | | | | |
| 6 | 6 | 62 | 7 | 5 | - | - | - | - | - | - | 2 | 7 | 20 | 9 | 22 | 11 | | | | | | |
| 6 | 13 | 62 | 7 | 12 | - | - | - | - | - | - | 0 | 8 | 14 | 9 | 14 | 12 | | | | | | |
| 6 | 20 | 62 | 8 | 15 | - | - | - | - | - | - | 5 | 7 | 10 | 9 | 15 | 11 | | | | | | |
| 6 | 27 | 62 | 8 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 6 | 14 | 8 | 17 | 10 | | | | | | |
| 7 | 11 | 62 | 10 | 2 | - | - | - | - | - | - | 1 | 5 | 12 | 8 | 13 | 9 | | | | | | |
| 7 | 17 | 62 | 8 | 3 | - | - | - | - | - | - | 0 | 7 | 12 | 10 | 12 | 12 | | | | | | |
| 7 | 25 | 62 | 8 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 22 | 16 | 14 | 16 | 26 | | | | | | |
| 8 | 1 | 62 | 8 | 23 | - | - | - | - | - | - | 2 | 11 | 18 | 13 | 20 | 17 | | | | | | |
| 8 | 8 | 62 | 8 | 29 | - | - | - | - | - | - | 6 | 11 | 15 | 13 | 21 | 17 | | | | | | |
| 8 | 15 | 62 | 10 | 8 | - | - | - | - | - | - | 7 | 10 | 10 | 14 | 17 | 17 | | | | | | |
| 8 | 22 | 62 | 9 | 6 | - | - | - | - | - | - | 10 | 11 | 29 | 15 | 39 | 19 | | | | | | |
| 8 | 29 | 62 | 9 | 11 | 0 | 1 | 0 | 3 | 0 | 3 | 6 | 13 | 15 | 19 | 21 | 23 | | | | | | |
| 9 | 5 | 62 | 10 | 1 | - | - | - | - | - | - | 6 | 11 | 13 | 15 | 19 | 19 | | | | | | |
| 9 | 12 | 62 | 10 | 1 | - | - | - | - | - | - | 0 | 11 | 66 | 20 | 66 | 23 | | | | | | |
| 9 | 19 | 62 | 10 | 10 | - | - | - | - | - | - | 3 | 6 | 6 | 11 | 9 | 13 | | | | | | |
| 9 | 26 | 62 | 10 | 18 | 0 | 1 | 0 | 2 | 0 | 2 | 4 | 11 | 17 | 14 | 21 | 18 | | | | | | |

**STATION LOCATION** ALLEGHENY RIVER AT

PITTSBURGH, PENNSYLVANIA 79

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 18 | 61 | 400 | 0 | 0 | 0 | 0 | 310 | 0 | 20 | 40 | 0 | 40 | 51 | 2 | | | | | | | | | | | | | | | | | | |
| 11 | 22 | 61 | 700 | 20 | 0 | 40 | 0 | 20 | 0 | 350 | 270 | 40 | 120 | 68 | 1 | 71 | 1 | | | | | | | | | | | | | | | | |
| 12 | 6 | 61 | 400 | 0 | 20 | 40 | 0 | 20 | 20 | 80 | 190 | 0 | 120 | | | | | | | | | | | | | | | | | | | | |
| 12 | 20 | 61 | 200 | 0 | 0 | 0 | 20 | 20 | 0 | 40 | 170 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 1 | 3 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 90 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 1 | 17 | 62 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 160 | 310 | 110 | 510 | | | | | | | | | | | | | | | | | | | | |
| 2 | 7 | 62 | 400 | 0 | 20 | 20 | 20 | 70 | 0 | 0 | 230 | 0 | 50 | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | 62 | 200 | 20 | 0 | 0 | 0 | 20 | 0 | 20 | 100 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 7 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 350 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 21 | 62 | 600 | 0 | 0 | 0 | 0 | 20 | 0 | 110 | 500 | 0 | 50 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 4 | 62 | 1100 | 20 | 0 | 20 | 0 | 0 | 0 | 40 | 990 | 20 | 120 | 82 | 1 | 92 | 2 | | | | | | | | | | | | | | | | |
| 4 | 18 | 62 | 700 | 0 | 0 | 0 | 0 | 40 | 0 | 60 | 580 | 0 | 120 | 92 | 1 | 88 | 1 | | | | | | | | | | | | | | | | |
| 5 | 9 | 62 | 1800 | 40 | 20 | 150 | 0 | 20 | 40 | 1120 | 440 | 60 | 190 | 71 | 3 | 92 | 1 | | | | | | | | | | | | | | | | |
| 5 | 23 | 62 | 400 | 0 | 0 | 60 | 0 | 80 | 20 | 120 | 150 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 6 | 6 | 62 | 700 | 0 | 0 | 310 | 0 | 80 | 20 | 100 | 190 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 6 | 20 | 62 | 9600 | 740 | 0 | 3520 | 0 | 910 | 210 | 3420 | 790 | 540 | 40 | 69 | 4 | 25 | 3 | 68 | 3 | 51 | 3 | 3 | 3 | 34 | 2 | 24 | 2 | 40 | 2 | 38 | 2 | 71 | 1 |
| 7 | 18 | 62 | 600 | 0 | 20 | 170 | 0 | 120 | 250 | 40 | 0 | 0 | 20 | 63 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 31 | 62 | 1400 | 0 | 0 | 270 | 0 | 830 | 120 | 80 | 80 | 80 | 0 | 51 | 3 | | | | | | | | | | | | | | | | | | |
| 8 | 15 | 62 | 2100 | 60 | 0 | 730 | 310 | 520 | 60 | 330 | 120 | 0 | 210 | 51 | 2 | 25 | 2 | 50 | 2 | 38 | 1 | | | | | | | | | | | | |
| 9 | 5 | 62 | 1800 | 0 | 0 | 800 | 0 | 380 | 170 | 300 | 170 | 130 | 130 | 38 | 2 | 51 | 2 | 40 | 2 | 68 | 1 | | | | | | | | | | | | |
| 9 | 19 | 62 | 900 | 0 | 0 | 780 | 0 | 30 | 0 | 20 | 30 | 20 | 20 | | | | | | | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** PENNSYLVANIA

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** ALLEGHENY RIVER

**STATION LOCATION** ALLEGHENY RIVER AT
PITTSBURGH, PENNSYLVANIA 079

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | PROTOZOA (Identifiable) Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | | |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 18 | 61 | 88 | 41 | 82 | 6 | 9 | 5 | 92 | 5 | 43 | 750 | 0 | 0 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 11 | 22 | 61 | 82 | 16 | 23 | 9 | 88 | 6 | 45 | 5 | 64 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 6 | 61 | 62 | 7 | 93 | 7 | 82 | 7 | 2 | 5 | 74 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 20 | 61 | | | | | | | | | | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 1 | 3 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 17 | 62 | 36 | 9 | 92 | 6 | 2 | 6 | 70 | 6 | 73 | 20 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 2 | 7 | 62 | 92 | 9 | 65 | 8 | 70 | 8 | 2 | 7 | 68 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 21 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 7 | 62 | 36 | 12 | 92 | 11 | 37 | 10 | 2 | 7 | 60 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 3 | 21 | 62 | 92 | 39 | 36 | 19 | 62 | 6 | 46 | 3 | 33 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 4 | 62 | 92 | 34 | 36 | 17 | 62 | 9 | 71 | 5 | 35 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 4 | 18 | 62 | 92 | 13 | 93 | 10 | 71 | 7 | 37 | 5 | 65 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 9 | 62 | 82 | 30 | 92 | 27 | 56 | 4 | 65 | 4 | 35 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 23 | 62 | 92 | 45 | 36 | 6 | 82 | 6 | 64 | 4 | 39 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 6 | 62 | 92 | 12 | 64 | 10 | 82 | 7 | 71 | 6 | 65 | 0 | 0 | 32 | 11 | 2 | 17 | 1 | | | | | | | 6 | 50 | 2 | | | | | 0 | 0 |
| 6 | 20 | 62 | 57 | 57 | 56 | 5 | 26 | 5 | 23 | 5 | 28 | 0 | 0 | 18 | 2 | 1 | 11 | 1 | | | | | | | 2 | | | | | | | 1 | 0 |
| 7 | 18 | 62 | 57 | 12 | 92 | 11 | 27 | 9 | 56 | 9 | 59 | 0 | 0 | 61 | 2 | 4 | 11 | 1 | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 31 | 62 | 57 | 10 | 82 | 8 | 27 | 7 | 26 | 6 | 69 | 0 | 0 | 114 | 11 | 4 | 18 | 2 | 17 | 1 | | | | | 16 | 51 | 2 | 50 | 1 | 76 | 1 | 0 | 0 |
| 8 | 15 | 62 | 57 | 26 | 70 | 9 | 82 | 8 | 56 | 7 | 50 | 0 | 0 | 148 | 17 | 5 | 16 | 3 | 11 | 2 | 21 | 1 | | | 50 | 50 | 4 | 51 | 3 | 53 | 2 | 0 | 0 |
| 9 | 5 | 62 | 57 | 12 | 82 | 9 | 92 | 6 | 27 | 6 | 67 | 40 | 0 | 198 | 17 | 5 | 11 | 3 | 16 | 3 | | | | | 172 | 50 | 5 | 76 | 5 | 51 | 4 | 0 | 0 |
| 9 | 19 | 62 | 71 | 13 | 27 | 8 | 26 | 6 | 88 | 6 | 67 | 0 | 0 | 26 | 2 | 3 | | | | | | | | | 15 | 76 | 2 | 51 | 2 | 50 | 1 | 0 | 0 |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 4 | 61 | 10 | 20 | 7429 | 252 | 93 | 159 | 3 | 13 | 34 | 6 | 3 | 23 | 2 | 13 | 9 | 2 | 19 |
| 11 | 8 | 61 | 11 | 22 | 7188 | 167 | 69 | 98 | 1 | 10 | 35 | 9 | 4 | 22 | 1 | 10 | 5 | 1 | 6 |
| 12 | 21 | 61 | 1 | 18 | 6115 | 154 | 56 | 98 | 2 | 10 | 26 | 10 | 5 | 11 | 0 | 7 | 4 | 1 | 6 |
| 2 | 7 | 62 | 2 | 21 | 4234 | 115 | 48 | 67 | 1 | 10 | 21 | 7 | 3 | 9 | 2 | 7 | 2 | 1 | 6 |
| 3 | 13 | 62 | 3 | 20 | 355 | * | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 4 | 62 | 5 | 27 | 4020 | 223 | 127 | 96 | 5 | 29 | 38 | 9 | 3 | 25 | 1 | 14 | 17 | 1 | 23 |
| 6 | 25 | 62 | 7 | 13 | 5302 | 368 | 184 | 184 | 5 | 35 | 52 | 7 | 4 | 38 | 3 | 24 | 26 | 2 | 40 |
| 8 | 2 | 62 | 8 | 17 | 3731 | 402 | 192 | 210 | 2 | 40 | 56 | 8 | 5 | 40 | 3 | 27 | 27 | 4 | 36 |
| 9 | 11 | 62 | 9 | 19 | 5772 | 246 | 94 | 152 | 7 | 30 | 20 | 3 | 2 | 15 | 0 | 8 | 9 | 1 | 19 |

* LOW FLOW - NOT PROCESSED

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 3 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 10 | 4 | 61 | 19.0 | 8.4 | 6.2 | 1.4 | 7 | .3 | - | .0 | 32 | 10 | 180 | 0 | 5 | 193 | .2 | 378 | - |
| 10 | 10 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 670 |
| 10 | 11 | 61 | 19.0 | 8.5 | 6.4 | 1.1 | 7 | .6 | - | .9 | 32 | 11 | 176 | 0 | 3 | 183 | .0 | 357 | - |
| 10 | 17 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 880 |
| 10 | 18 | 61 | 17.0 | 8.6 | 6.5 | 1.6 | 3 | .4 | .9 | .7 | 38 | | 196 | 0 | 3 | 202 | .0 | 409 | - |
| 10 | 24 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1800 |
| 10 | 25 | 61 | 16.0 | 8.8 | 6.7 | 1.2 | 5 | .4 | 9.7 | 1.1 | 40 | 15 | 208 | 0 | 5 | 191 | .0 | 405 | - |
| 10 | 31 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1300 |
| 11 | 1 | 61 | 15.0 | 9.4 | 6.6 | - | 7 | .4 | 9.2 | .8 | 43 | 15 | 196 | 0 | 5 | 203 | .2 | 417 | - |
| 11 | 8 | 61 | 14.0 | 9.6 | 7.0 | 2.6 | 8 | .4 | 7.3 | .5 | 45 | 25 | 176 | 0 | 8 | 166 | .0 | 363 | - |
| 11 | 14 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 8800 |
| 11 | 15 | 61 | 12.0 | 10.0 | 7.0 | 1.4 | 10 | .3 | 7.7 | .6 | 46 | 28 | 192 | 0 | 10 | 171 | .0 | 202 | - |
| 11 | 21 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 7300 |
| 11 | 22 | 61 | 8.0 | 12.6 | 7.1 | 1.6 | 10 | .6 | - | .3 | 40 | 32 | 134 | 0 | 12 | 95 | .1 | 242 | - |
| 11 | 28 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 13000 |
| 11 | 29 | 61 | 6.0 | 12.8 | 7.0 | 1.8 | 17 | .6 | 5.3 | .2 | 14 | 17 | 72 | 30 | 45 | 54 | .0 | 157 | - |
| 12 | 5 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2100 |
| 12 | 6 | 61 | 6.0 | 12.8 | 6.6 | 1.2 | 17 | .8 | 4.8 | .3 | 14 | 16 | 80 | 25 | 20 | 69 | .0 | 148 | - |
| 12 | 12 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1200 |
| 12 | 13 | 61 | 4.0 | 13.6 | 7.1 | 1.0 | 9 | .3 | 4.7 | .2 | 19 | 30 | 104 | 20 | 8 | 68 | .0 | 172 | - |
| 12 | 20 | 61 | 3.0 | 14.1 | 6.9 | 1.4 | 14 | 1.0 | 5.4 | .2 | 17 | 22 | 94 | 25 | 15 | 67 | .1 | 226 | - |
| 12 | 26 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4900 |
| 12 | 27 | 61 | .5 | 13.6 | 7.0 | 1.4 | - | .6 | 4.8 | .2 | 19 | 23 | 80 | 20 | 5 | 64 | .0 | 176 | - |
| 1 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2600 |
| 1 | 3 | 62 | .5 | 14.2 | 6.7 | - | 8 | .6 | 5.6 | .3 | 17 | 20 | 96 | 10 | 5 | 75 | .0 | 177 | - |
| 1 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 6200 |
| 1 | 10 | 62 | 2.0 | 15.6 | 6.8 | 1.4 | 33 | .6 | 5.2 | .2 | 16 | 21 | 74 | 25 | 50 | 58 | .0 | 176 | - |
| 1 | 12 | 62 | .0 | 14.8 | 6.7 | 2.0 | 11 | .4 | 5.8 | .2 | 14 | 14 | 82 | 20 | 10 | 62 | .0 | 162 | - |
| 1 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 670 |
| 1 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1100 |
| 1 | 24 | 62 | 1.0 | 14.2 | 7.1 | 1.0 | 14 | .8 | 6.8 | .1 | 15 | 18 | 92 | 20 | 15 | 63 | .0 | 192 | - |
| 1 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 530 |
| 1 | 31 | 62 | .0 | 14.6 | 7.2 | 2.2 | 16 | .6 | 4.8 | .1 | 11 | 12 | 60 | 30 | 60 | 53 | .0 | 140 | - |
| 2 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 2 | 7 | 62 | .0 | 14.6 | 6.6 | 1.0 | 27 | 1.6 | 3.7 | .2 | 12 | 12 | 80 | 15 | 15 | 63 | .0 | 143 | - |
| 2 | 13 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *11 |
| 2 | 14 | 62 | 1.0 | 14.4 | 6.5 | 1.2 | 25 | 1.6 | 4.9 | .2 | 17 | 13 | 88 | 0 | 5 | 73 | .0 | 180 | - |
| 2 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 570 |

NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE PENNSYLVANIA
MAJOR BASIN OHIO RIVER
MINOR BASIN ALLEGHENY RIVER
STATION LOCATION ALLEGHENY RIVER AT
PITTSBURGH, PENNSYLVANIA 79

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 21 | 62 | 3.0 | 13.6 | 6.7 | .8 | 18 | 1.8 | - | .1 | 16 | 15 | 102 | 0 | 10 | 88 | .0 | 228 | - |
| 2 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 380 |
| 2 | 28 | 62 | 4.0 | 14.0 | 6.8 | 1.2 | 34 | .7 | 4.6 | .1 | 14 | 17 | 84 | 25 | 90 | 59 | .0 | 180 | - |
| 3 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 220 |
| 3 | 7 | 62 | 3.0 | 14.2 | 6.7 | - | 29 | 1.2 | 4.0 | .2 | 13 | 11 | 74 | 0 | 30 | 68 | .0 | 150 | - |
| 3 | 13 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3000 |
| 3 | 14 | 62 | 3.0 | 14.2 | 6.8 | 1.6 | 31 | .8 | 4.5 | .2 | 14 | 20 | 70 | 0 | 80 | 62 | .0 | 173 | - |
| 3 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4200 |
| 3 | 21 | 62 | 5.0 | 13.4 | 7.2 | .6 | 39 | .8 | 4.6 | .2 | 12 | 15 | 68 | 5 | 40 | 62 | .0 | 168 | - |
| 3 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 970 |
| 3 | 28 | 62 | 6.0 | 13.0 | 6.3 | .8 | 39 | .8 | 4.4 | .1 | 24 | 11 | 50 | 0 | 50 | 50 | .0 | 108 | - |
| 4 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 180 |
| 4 | 4 | 62 | 6.0 | 13.4 | 6.4 | 1.2 | 48 | .8 | 4.9 | .1 | 10 | 9 | 50 | 15 | 45 | 45 | .1 | 114 | - |
| 4 | 10 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1500 |
| 4 | 11 | 62 | - | - | - | - | - | - | - | - | 14 | - | - | - | - | - | - | - | - |
| 4 | 14 | 62 | 9.0 | 12.6 | 6.8 | .8 | 30 | .7 | 4.1 | .0 | 10 | 13 | 50 | 5 | 35 | 49 | .0 | 115 | - |
| 4 | 17 | 62 | - | - | - | - | - | - | - | - | 20 | - | - | - | - | - | - | - | 300 |
| 4 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 50 |
| 4 | 25 | 62 | 12.0 | 12.4 | 6.6 | .6 | 37 | .6 | 3.9 | .1 | 11 | 13 | 70 | 0 | 10 | 65 | .0 | 162 | - |
| 5 | 1 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2400 |
| 5 | 2 | 62 | 19.0 | 9.4 | 6.3 | .7 | 21 | .4 | 3.7 | .1 | 12 | 12 | 86 | 0 | 10 | 80 | .0 | 180 | - |
| 5 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4300 |
| 5 | 9 | 62 | 16.0 | 9.2 | 6.7 | .7 | 37 | .5 | 3.8 | .1 | 10 | 17 | 70 | 0 | 20 | 63 | .0 | 145 | - |
| 5 | 15 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3100 |
| 5 | 16 | 62 | 19.0 | 9.4 | 6.6 | 1.0 | 30 | .5 | 2.9 | .2 | 13 | 17 | 82 | 0 | 12 | 71 | .0 | 143 | - |
| 5 | 22 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1400 |
| 5 | 23 | 62 | 23.0 | 8.4 | 6.7 | 1.0 | 25 | .6 | 4.4 | .1 | 15 | 14 | 100 | 0 | 8 | 92 | .0 | 223 | - |
| 5 | 29 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2600 |
| 6 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 18000 |
| 6 | 6 | 62 | 23.0 | - | 6.5 | - | - | .6 | 4.8 | .2 | 18 | 15 | 122 | 0 | 10 | 124 | .0 | 243 | - |
| 6 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 500 |
| 6 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5700 |
| 6 | 20 | 62 | 24.0 | 8.5 | 7.2 | 1.6 | 20 | .7 | 5.2 | .2 | 19 | 23 | 82 | 15 | 15 | 74 | .0 | 194 | - |
| 6 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1900 |
| 6 | 27 | 62 | 25.0 | 8.8 | 7.1 | 1.0 | 28 | .7 | 6.2 | .2 | 16 | 23 | 94 | 15 | 15 | 86 | .0 | 218 | - |
| 7 | 10 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2300 |
| 7 | 11 | 62 | 26.0 | 8.0 | 7.1 | .8 | 30 | .4 | 5.9 | .2 | 20 | 16 | 164 | 0 | 10 | 142 | .0 | 281 | - |
| 7 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 300 |
| 7 | 18 | 62 | 26.0 | 7.4 | 6.8 | 2.0 | 19 | .5 | 7.8 | .2 | 21 | 10 | 180 | 0 | 5 | 168 | .0 | 318 | - |

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** ALLEGHENY RIVER
**STATION LOCATION** ALLEGHENY RIVER AT
PITTSBURGH, PENNSYLVANIA 79

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1700 |
| 7 | 25 | 62 | 26.0 | 7.8 | 6.9 | 1.0 | 25 | .3 | 8.9 | - | 27 | 14 | 188 | 0 | 5 | 180 | .0 | 345 | - |
| 7 | 31 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 380 |
| 8 | 14 | 62 | 26.0 | 7.4 | 6.9 | 1.4 | 21 | .4 | 5.6 | .6 | 31 | 23 | 168 | 0 | 10 | 158 | .0 | 369 | 5300 |
| 8 | 22 | 62 | 29.0 | - | 5.2 | - | - | .4 | 6.0 | .9 | 35 | 4 | 224 | 0 | 5 | 249 | .0 | 468 | *50 |
| 8 | 28 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4200 |
| 8 | 29 | 62 | 25.0 | - | 6.7 | 1.4 | 22 | .6 | 6.2 | .6 | 44 | 23 | 180 | 0 | 10 | 160 | .0 | 388 | - |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1400 |
| 9 | 12 | 62 | 7.2 | 10.0 | 3.7 | 1.8 | 18 | .4 | 5.8 | .5 | 30 | 14 | 230 | 0 | 5 | 220 | .0 | 562 | - |
| 9 | 25 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1500 |

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Natrona, Pennsylvania
Operated by U.S. Geological Survey

MINOR BASIN Allegheny River

STATION LOCATION Allegheny River at Pittsburgh, Pennsylvania

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.140 | 3.110 | 14.000 | 5.360 | 18.700 | 42.200 | 61.900 | 14.900 | 5.490 | 2.770 | 2.060 | 1.710 |
| 2 | 1.960 | 3.160 | 11.600 | 5.430 | 15.800 | 42.200 | 58.900 | 19.700 | 6.120 | 2.240 | 2.000 | 2.140 |
| 3 | 2.140 | 3.250 | 9.370 | 6.120 | 14.900 | 50.300 | 60.400 | 26.200 | 5.490 | 2.540 | 1.960 | 1.860 |
| 4 | 2.390 | 3.340 | 7.870 | 7.600 | 14.400 | 44.800 | 55.900 | 28.600 | 4.760 | 2.690 | 2.310 | 2.100 |
| 5 | 2.540 | 2.900 | 8.510 | 8.150 | 15.400 | 33.400 | 48.900 | 25.100 | 5.180 | 2.500 | 1.850 | 2.460 |
| 6 | 2.540 | 2.420 | 8.580 | 10.100 | 18.700 | 26.800 | 40.900 | 20.700 | 5.060 | 2.500 | 1.410 | 2.980 |
| 7 | 2.500 | 2.460 | 11.600 | 16.800 | 20.700 | 22.400 | 44.800 | 16.700 | 5.060 | 2.580 | 1.700 | 3.200 |
| 8 | 2.310 | 2.940 | 14.000 | 37.200 | 19.700 | 19.700 | 48.900 | 16.700 | 5.060 | 2.240 | 1.890 | 2.560 |
| 9 | 2.060 | 2.940 | 12.800 | 42.200 | 16.200 | 15.400 | 57.400 | 16.200 | 4.470 | 1.860 | 2.060 | 2.200 |
| 10 | 2.170 | 3.030 | 10.100 | 36.700 | 14.900 | 14.000 | 57.400 | 15.800 | 3.800 | 1.860 | 2.000 | 1.930 |
| 11 | 2.170 | 2.900 | 9.370 | 20.600 | 12.800 | 12.800 | 58.900 | 14.000 | 3.200 | 1.960 | 2.060 | 2.060 |
| 12 | 2.000 | 2.770 | 10.800 | 13.600 | 10.100 | 16.900 | 53.100 | 13.200 | 3.440 | 1.890 | 1.930 | 2.240 |
| 13 | 1.950 | 2.500 | 13.600 | 10.800 | 9.740 | 35.800 | 42.200 | 11.200 | 6.470 | 2.000 | 1.760 | 2.200 |
| 14 | 2.420 | 3.190 | 16.700 | 8.940 | 10.100 | 46.100 | 44.800 | 10.500 | 14.400 | 2.060 | 1.890 | 2.140 |
| 15 | 2.350 | 3.960 | 19.200 | 9.740 | 10.100 | 47.500 | 55.900 | 10.100 | 18.700 | 1.960 | 1.930 | 2.030 |
| 16 | 2.310 | 5.700 | 15.800 | 14.800 | 9.740 | 39.600 | 60.400 | 9.370 | 18.700 | 1.570 | 1.890 | 1.830 |
| 17 | 2.100 | 10.500 | 12.800 | 18.700 | 9.370 | 30.400 | 54.500 | 8.940 | 15.400 | 1.670 | 1.890 | 1.600 |
| 18 | 2.170 | 14.000 | 11.600 | 18.700 | 8.870 | 25.100 | 48.900 | 8.440 | 11.600 | 1.860 | 1.890 | 1.660 |
| 19 | 2.140 | 16.700 | 14.900 | 15.800 | 8.510 | 22.900 | 40.900 | 7.940 | 9.370 | 1.700 | 1.700 | 1.860 |
| 20 | 2.310 | 14.400 | 16.200 | 12.800 | 9.740 | 24.000 | 31.000 | 6.380 | 7.730 | 1.700 | 1.380 | 1.830 |
| 21 | 2.540 | 12.400 | 21.800 | 10.500 | 10.500 | 30.400 | 26.800 | 6.000 | 6.650 | 1.810 | 1.510 | 1.800 |
| 22 | 2.320 | 10.100 | 23.400 | 11.200 | 10.800 | 44.800 | 22.900 | 6.650 | 5.490 | 1.890 | 1.860 | 1.700 |
| 23 | 1.830 | 10.500 | 21.800 | 18.000 | 14.400 | 57.400 | 20.700 | 6.450 | 4.020 | 1.730 | 2.310 | 1.570 |
| 24 | 1.800 | 20.300 | 18.700 | 22.400 | 29.800 | 69.400 | 22.400 | 6.710 | 5.000 | 2.060 | 2.060 | 1.410 |
| 25 | 1.960 | 38.300 | 15.800 | 29.800 | 20.700 | 67.900 | 27.400 | 7.320 | 4.420 | 2.200 | 2.030 | 1.410 |
| 26 | 2.100 | 43.500 | 12.800 | 28.600 | 26.800 | 61.900 | 22.900 | 8.220 | 4.300 | 2.200 | 1.580 | 1.600 |
| 27 | 2.100 | 34.600 | 12.000 | 34.600 | 28.600 | 55.900 | 19.700 | 7.250 | 4.130 | 2.350 | 1.230 | 1.900 |
| 28 | 2.170 | 26.200 | 12.000 | 37.000 | 38.300 | 44.800 | 18.200 | 6.120 | 3.740 | 2.390 | 1.200 | 3.850 |
| 29 | 2.280 | 20.700 | 10.800 | 40.900 |  | 39.600 | 15.400 | 6.260 | 3.440 | 2.420 | 1.260 | 4.390 |
| 30 | 2.200 | 16.700 | 9.300 | 37.000 |  | 37.000 | 13.200 | 5.800 | 3.200 | 2.060 | 1.350 | 5.320 |
| 31 | 2.840 |  | 5.800 | 28.600 |  | 44.800 |  | 4.700 |  | 2.170 | 1.410 |  |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 13 | 61 | 10 | 25 | 5000# | 87 | 24 | 63 | 1 | 6 | 7 | 1 | 1 | 5 | 0 | 2 | 2 | 1 | 5 |
| 11 | 17 | 61 | 11 | 27 | 7448 | 70 | 25 | 45 | 0 | 6 | 12 | 3 | 1 | 8 | 0 | 3 | 1 | 0 | 2 |
| 12 | 4 | 61 | 12 | 18 | 8540 | 52 | 16 | 36 | 0 | 5 | 7 | 1 | 1 | 5 | 0 | 2 | 1 | 0 | 1 |
| 1 | 2 | 62 | 1 | 15 | 8912 | 43 | 12 | 31 | 0 | 2 | 6 | 1 | 1 | 4 | 0 | 1 | 1 | 0 | 2 |
| 2 | 5 | 62 | 2 | 12 | 3719 | 80 | 21 | 59 | 0 | 4 | 10 | 2 | 1 | 7 | 0 | 2 | 1 | 1 | 3 |
| 3 | 5 | 62 | 3 | 13 | 5000 | 59 | 16 | 43 | 0 | 3 | 8 | 2 | 1 | 5 | 0 | 1 | 1 | 0 | 3 |
| 4 | 2 | 62 | 4 | 9 | 3285 | 82 | 28 | 54 | 1 | 6 | 13 | 3 | 1 | 8 | 1 | 3 | 1 | 1 | 3 |
| 5 | 7 | 62 | 5 | 14 | 3036 | 106 | 48 | 58 | 1 | 15 | 12 | 3 | 0 | 9 | 0 | 5 | 4 | 1 | 10 |
| 6 | 4 | 62 | 6 | 11 | 2330 | 68 | 24 | 44 | 0 | 8 | 8 | 2 | 1 | 5 | 0 | 3 | 1 | 0 | 4 |
| 7 | 2 | 62 | 7 | 9 | 5300 | 48 | 14 | 34 | 0 | 4 | 6 | 2 | 1 | 3 | 0 | 1 | 1 | 0 | 2 |
| 8 | 6 | 62 | 8 | 13 | 2765 | 141 | 39 | 102 | 1 | 11 | 15 | 3 | 1 | 11 | 0 | 4 | 2 | 1 | 5 |
| 9 | 4 | 62 | 9 | 10 | 4556 | 112 | 28 | 84 | 1 | 8 | 12 | 2 | 1 | 9 | 0 | 4 | 1 | 1 | 1 |

# ESTIMATED

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** SAN JUAN RIVER

**STATION LOCATION** ANIMAS RIVER AT
CEDAR HILL, NEW MEXICO

56

| DATE SAMPLE TAKEN | | | DATE OF DETERMINATION | | RADIOACTIVITY IN WATER | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 11 | 8 | 1 | 1 | 3 | 2 | 4 | 2 | 8 | 5 | 21 | 7 | 29 | 9 | | | | | | |
| 10 | 16 | 61 | 11 | 1 | 4 | 2 | 6 | 2 | 10 | 3 | 13 | 6 | 12 | 6 | 25 | 8 | | | | | | |
| 10 | 23 | 61 | 11 | 7 | 2 | 1 | 6 | 2 | 8 | 2 | 10 | 5 | 48 | 7 | 58 | 9 | | | | | | |
| 10 | 30 | 61 | 11 | 13 | 0 | 1 | 2 | 2 | 2 | 2 | 15 | 5 | 21 | 6 | 36 | 8 | | | | | | |
| 11 | 6 | 61 | 11 | 21 | 0 | 1 | 10 | 3 | 10 | 3 | 9 | 9 | 34 | 11 | 43 | 14 | | | | | | |
| 11 | 13 | 61 | 11 | 28 | 1 | 1 | 7 | 3 | 8 | 3 | 6 | 5 | 27 | 8 | 33 | 9 | | | | | | |
| 12 | 18 | 61 | 1 | 4 | 3 | 2 | 12 | 4 | 15 | 4 | 20 | 9 | 34 | 11 | 54 | 14 | | | | | | |
| 12 | 26 | 61 | 1 | 9 | 5 | 2 | 9 | 3 | 14 | 4 | 24 | 9 | 31 | 11 | 55 | 14 | | | | | | |
| 1 | 2 | 62 | 1 | 23 | 2 | 1 | 16 | 4 | 18 | 4 | 9 | 8 | 32 | 11 | 41 | 14 | | | | | | |
| 1 | 8 | 62 | 1 | 19 | 1 | 1 | 10 | 3 | 11 | 3 | 4 | 8 | 19 | 11 | 23 | 14 | | | | | | |
| 1 | 15 | 62 | 1 | 31 | 1 | 1 | 13 | 4 | 14 | 4 | 37 | 9 | 32 | 11 | 69 | 14 | | | | | | |
| 1 | 22 | 62 | 2 | 6 | 2 | 1 | 12 | 4 | 14 | 4 | 23 | 9 | 38 | 11 | 61 | 14 | | | | | | |
| 1 | 29 | 62 | 2 | 12 | 1 | 1 | 16 | 5 | 17 | 5 | 10 | 8 | 51 | 12 | 61 | 14 | | | | | | |
| 2 | 5 | 62 | 2 | 19 | 2 | 1 | 4 | 3 | 6 | 3 | 11 | 4 | 32 | 7 | 43 | 8 | | | | | | |
| 2 | 12 | 62 | 2 | 27 | 36 | 15 | 9 | 4 | 45 | 16 | 194 | 21 | 40 | 11 | 234 | 24 | | | | | | |
| 2 | 19 | 62 | 3 | 7 | 73 | 17 | 8 | 4 | 81 | 17 | 217 | 20 | 60 | 12 | 277 | 23 | | | | | | |
| 2 | 26 | 62 | 3 | 14 | 5 | 3 | 19 | 5 | 24 | 6 | 65 | 11 | 62 | 12 | 127 | 16 | | | | | | |
| 3 | 5 | 62 | 3 | 20 | 2 | 1 | 8 | 3 | 10 | 3 | 12 | 8 | 36 | 11 | 48 | 14 | | | | | | |
| 3 | 13 | 62 | 3 | 27 | 3 | 2 | 8 | 4 | 11 | 4 | 39 | 10 | 48 | 12 | 87 | 16 | | | | | | |
| 3 | 19 | 62 | 4 | 3 | 27 | 9 | 9 | 3 | 36 | 9 | 111 | 16 | 27 | 10 | 138 | 19 | | | | | | |
| 3 | 26 | 62 | 4 | 12 | 18 | 11 | 2 | 2 | 20 | 11 | 135 | 20 | 19 | 9 | 154 | 22 | | | | | | |
| 4 | 2 | 62 | 4 | 23 | 17 | 6 | 1 | 2 | 18 | 7 | 71 | 14 | 30 | 10 | 101 | 17 | | | | | | |
| 4 | 11 | 62 | 4 | 25 | 9 | 3 | 4 | 2 | 13 | 4 | 53 | 7 | 30 | 6 | 83 | 9 | | | | | | |
| 4 | 23 | 62 | 5 | 25 | 2 | 2 | 1 | 1 | 3 | 2 | 18 | 8 | 29 | 7 | 47 | 11 | | | | | | |
| 4 | 30 | 62 | 6 | 7 | 1 | 1 | 1 | 1 | 2 | 1 | 19 | 6 | 22 | 6 | 41 | 8 | | | | | | |
| 5 | 7 | 62 | 6 | 14 | 21 | 7 | 1 | 1 | 22 | 7 | 101 | 14 | 14 | 8 | 115 | 16 | | | | | | |
| 5 | 14 | 62 | 7 | 26 | 1 | 1 | 0 | 1 | 1 | 1 | 13 | 7 | 14 | 7 | 27 | 10 | | | | | | |
| 5 | 21 | 62 | 6 | 29 | 2 | 1 | 1 | 1 | 3 | 1 | 14 | 4 | 14 | 4 | 28 | 6 | | | | | | |
| 5 | 31 | 62 | 7 | 3 | 5 | 2 | 1 | 1 | 6 | 2 | 41 | 8 | 16 | 7 | 57 | 11 | | | | | | |
| 6 | 4 | 62 | 7 | 3 | 2 | 1 | 1 | 1 | 3 | 1 | 10 | 6 | 18 | 7 | 28 | 9 | | | | | | |
| 6 | 11 | 62 | 7 | 9 | 1 | 1 | 1 | 1 | 2 | 1 | 16 | 12 | 13 | 9 | 29 | 15 | | | | | | |
| 6 | 19 | 62 | 7 | 23 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 6 | 10 | 6 | 30 | 8 | | | | | | |
| 6 | 25 | 62 | 7 | 24 | 2 | 1 | 2 | 1 | 4 | 1 | 23 | 8 | 14 | 6 | 37 | 10 | | | | | | |
| 7 | 2 | 62 | 10 | 17 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 5 | 4 | 7 | 6 | 8 | | | | | | |
| 7 | 9 | 62 | 8 | 13 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 3 | 11 | 4 | 12 | 5 | | | | | | |
| 7 | 18 | 62 | 8 | 2 | 1 | 1 | 3 | 2 | 4 | 2 | 13 | 6 | 11 | 8 | 24 | 10 | | | | | | |
| 7 | 23 | 62 | 8 | 20 | 0 | 0 | 3 | 1 | 3 | 1 | 3 | 2 | 15 | 3 | 18 | 4 | | | | | | |
| 7 | 30 | 62 | 8 | 31 | 1 | 1 | 3 | 2 | 4 | 2 | 5 | 6 | 16 | 10 | 21 | 12 | | | | | | |
| 8 | 6 | 62 | 8 | 23 | 0 | 1 | 1 | 2 | 1 | 2 | 2 | 5 | 12 | 8 | 14 | 9 | | | | | | |
| 8 | 13 | 62 | 8 | 30 | 0 | 1 | 7 | 3 | 7 | 3 | 8 | 11 | 20 | 13 | 28 | 17 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 8 | 20 | 62 | 9 | 9 | 0 | 1 | 2 | 2 | 2 | 2 | 23 | 8 | 44 | 10 | 67 | 13 | | | | | | |
| 8 | 27 | 62 | 9 | 11 | 2 | 2 | 10 | 4 | 12 | 4 | 3 | 17 | 27 | 17 | 30 | 24 | | | | | | |
| 9 | 4 | 62 | 9 | 20 | 1 | 1 | 9 | 4 | 10 | 4 | 1 | 11 | 12 | 15 | 13 | 19 | | | | | | |
| 9 | 10 | 62 | 10 | 1 | 0 | 1 | 9 | 4 | 9 | 5 | 9 | 13 | 54 | 18 | 63 | 22 | | | | | | |
| 9 | 18 | 62 | 10 | 10 | 0 | 1 | 5 | 3 | 5 | 3 | 2 | 10 | 24 | 15 | 26 | 18 | | | | | | |
| 9 | 24 | 62 | 10 | 23 | 1 | 1 | 4 | 3 | 5 | 3 | 0 | 22 | 15 | 13 | 15 | 26 | | | | | | |

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10T | |
| MONTH | DAY | YEAR | TOTAL | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 380 | 0 | 540 | | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 1500 | 0 | 0 | 0 | 0 | 100 | 20 | 150 | 1260 | 0 | 150 | 91 | 3 | 77 | 1 | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 1800 | 0 | 40 | 0 | 20 | 0 | 0 | 20 | 1700 | 0 | 190 | 91 | 3 | 92 | 1 | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 700 | 50 | 0 | 0 | 0 | 0 | 20 | 50 | 620 | 0 | 200 | 91 | 1 | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 2300 | 0 | 0 | 0 | 20 | 50 | 0 | 0 | 2210 | 0 | 800 | 91 | 4 | 92 | 1 | 87 | 1 | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 1200 | 0 | 0 | 0 | 0 | 50 | 0 | 0 | 1150 | 20 | 110 | 91 | 2 | 92 | 1 | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 600 | 0 | 0 | 0 | 0 | 0 | 20 | 80 | 460 | 0 | 40 | 91 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 300 | 20 | 50 | 0 | 0 | 20 | 0 | 0 | 180 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 900 | 0 | 40 | 0 | 20 | 20 | 20 | 20 | 750 | 0 | 120 | 91 | 2 | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 3100 | 0 | 20 | 0 | 50 | 0 | 0 | 20 | 2970 | 0 | 620 | 91 | 5 | 81 | 1 | 87 | 1 | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 3000 | 0 | 80 | 0 | 0 | 120 | 0 | 230 | 2590 | 0 | 310 | 91 | 4 | 92 | 1 | 88 | 1 | 73 | 1 | | | | | | | | | | | | |
| 3 | 19 | 62 | 3900 | 0 | 0 | 20 | 40 | 0 | 20 | 60 | 3710 | 0 | 440 | 91 | 4 | 92 | 2 | 81 | 1 | 82 | 1 | | | | | | | | | | | | |
| 4 | 2 | 62 | 5100 | 0 | 80 | 0 | 60 | 100 | 0 | 40 | 4800 | 0 | 970 | 91 | 5 | 92 | 3 | 88 | 1 | 81 | 1 | 84 | 1 | 87 | 1 | 82 | 1 | | | | | | |
| 4 | 16 | 62 | 4400 | 0 | 80 | 0 | 0 | 0 | 0 | 210 | 4070 | 110 | 2640 | 91 | 4 | 92 | 3 | 88 | 1 | 81 | 1 | 84 | 1 | 82 | 1 | 87 | 1 | | | | | | |
| 5 | 7 | 62 | 2300 | 0 | 40 | 0 | 20 | 0 | 20 | 100 | 2070 | 0 | 500 | 91 | 3 | 92 | 1 | 73 | 1 | 81 | 1 | | | | | | | | | | | | |
| 5 | 21 | 62 | 1300 | 0 | 0 | 0 | 0 | 800 | 0 | 80 | 420 | 0 | 130 | 57 | 3 | | | | | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 1700 | 0 | 0 | 0 | 20 | 0 | 0 | 60 | 1590 | 0 | 210 | 92 | 2 | 87 | 1 | 91 | 1 | | | | | | | | | | | | | | |
| 6 | 19 | 62 | 600 | 0 | 0 | 60 | 0 | 0 | 0 | 250 | 300 | 40 | 420 | | | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 400 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 330 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 800 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 720 | 0 | 250 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 3700 | 0 | 0 | 40 | 190 | 0 | 0 | 210 | 3230 | 120 | 460 | 91 | 4 | 92 | 2 | 50 | 1 | 73 | 1 | | | | | | | | | | | | |
| 8 | 20 | 62 | 3400 | 0 | 40 | 130 | 0 | 0 | 0 | 80 | 3170 | 0 | 1730 | 91 | 4 | 88 | 3 | 92 | 2 | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 100 | 0 | 0 | 70 | 0 | 0 | 0 | 10 | 70 | 10 | 2790 | | | | | | | | | | | | | | | | | | | | |
| 9 | 18 | 62 | 300 | 0 | 0 | 60 | 0 | 10 | 0 | 10 | 250 | 10 | 1280 | 92 | 1 | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 86 | 29 | 47 | 10 | 92 | 10 | 93 | 10 | 41 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 86 | 43 | 47 | 14 | 92 | 8 | 93 | 5 | 30 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 86 | 66 | 9 | 6 | 93 | 5 | 2 | 3 | 20 | 0 | 0 | 6 | 46 | 1 | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 11 | 20 | 61 | 86 | 74 | 9 | 6 | 2 | 3 | 31 | 2 | 15 | 220 | 0 | 6 | 46 | 1 | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 12 | 4 | 61 | 86 | 68 | 93 | 7 | 36 | 3 | 31 | 3 | 19 | 70 | 0 | 7 | 15 | 1 | | | | | | | | | 0 | | | | | | | 2 | 3 |
| 12 | 18 | 61 | 86 | 46 | 93 | 15 | 31 | 8 | 2 | 6 | 25 | 50 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 1 | 1 |
| 1 | 2 | 62 | 86 | 61 | 65 | 9 | 93 | 9 | 70 | 5 | 16 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 3 |
| 1 | 15 | 62 | 86 | 43 | 65 | 8 | 71 | 8 | 31 | 4 | 37 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 86 | 55 | 93 | 10 | 31 | 5 | 71 | 4 | 26 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 2 |
| 2 | 19 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 86 | 57 | 93 | 10 | 2 | 6 | 31 | 5 | 22 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 1 | 6 |
| 3 | 19 | 62 | 86 | 63 | 31 | 6 | 92 | 5 | 93 | 5 | 21 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 4 | 2 | 62 | 86 | 57 | 92 | 12 | 31 | 3 | 71 | 3 | 25 | 150 | 0 | 5 | 15 | 1 | | | | | | | | | 0 | | | | | | | 0 | 3 |
| 4 | 16 | 62 | 86 | 31 | 92 | 16 | 36 | 5 | 88 | 3 | 45 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 86 | 28 | 92 | 11 | 2 | 9 | 45 | 7 | 45 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 92 | 10 | 2 | 9 | 36 | 7 | 71 | 6 | 68 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 92 | 24 | 86 | 13 | 65 | 9 | 2 | 6 | 48 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 6 | 19 | 62 | 2 | 15 | 36 | 9 | 92 | 8 | 31 | 6 | 62 | 0 | 0 | 15 | 15 | 2 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 92 | 21 | 14 | 12 | 86 | 7 | 36 | 6 | 54 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 4 |
| 7 | 16 | 62 | 93 | 23 | 2 | 16 | 92 | 10 | 86 | 8 | 43 | 40 | 0 | 12 | 15 | 1 | | | | | | | | | 0 | | | | | | | 5 | 3 |
| 8 | 6 | 62 | 86 | 69 | 93 | 12 | 2 | 6 | 92 | 3 | 10 | 0 | 0 | 37 | 13 | 3 | 2 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 86 | 48 | 70 | 30 | 92 | 6 | 93 | 4 | 12 | 0 | 0 | 58 | 21 | 3 | 13 | 1 | 16 | 1 | | | | | 0 | | | | | | | 0 | 1 |
| 9 | 4 | 62 | 70 | 38 | 86 | 34 | 93 | 6 | 31 | 5 | 17 | 0 | 0 | 123 | 15 | 4 | 22 | 3 | 13 | 2 | 6 | 2 | 20 | 1 | 0 | | | | | | | 0 | 0 |
| 9 | 18 | 62 | 92 | 62 | 70 | 18 | 86 | 6 | 92 | 5 | 9 | 0 | 0 | 256 | 22 | 5 | 13 | 4 | 4 | 2 | 6 | 1 | 11 | 1 | 0 | | | | | | | 1 | 0 |

CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

MINOR BASIN SAN JUAN RIVER

STATION LOCATION ANIMAS RIVER AT

CEDAR HILL, NEW MEXICO 56

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 3 | 61 | 12.0 | 9.0 | 8.0 | .1 | - | - | - | .1 | 22 | 90 | 178 | 3 | 24 | 88 | - | 260 | 90 |
| 10 | 11 | 61 | 10.0 | 4.3 | 7.9 | 2.8 | - | - | - | .1 | 25 | 178 | 126 | 3 | 17000 | 140 | - | - | 730 |
| 10 | 16 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3500 |
| 10 | 17 | 61 | 9.0 | 8.9 | 8.3 | .9 | - | - | - | .1 | 15 | 86 | 160 | 2 | 43 | 130 | - | 370 | - |
| 10 | 24 | 61 | 10.0 | 9.0 | 8.5 | .3 | - | - | - | .1 | 23 | 88 | 158 | 3 | 50 | 90 | - | 240 | - |
| 10 | 30 | 61 | 4.0 | 10.5 | 8.2 | 1.8 | - | - | - | .3 | 19 | 94 | 178 | 3 | 33 | 82 | .4 | 290 | 110 |
| 11 | 6 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 7 |
| 11 | 8 | 61 | 3.0 | 11.5 | 8.3 | 2.4 | - | - | - | .3 | 34 | 100 | 170 | - | 13 | 162 | - | 310 | - |
| 11 | 14 | 61 | 4.4 | 10.2 | 8.3 | 2.4 | - | - | - | .1 | 20 | 98 | 182 | - | 12 | 108 | - | 310 | 900 |
| 11 | 17 | 61 | - | - | - | - | 9 | - | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 20 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 11 | 22 | 61 | 3.7 | 11.2 | 8.2 | 1.4 | - | - | - | .1 | 35 | 102 | 172 | 2 | 23 | 112 | - | 380 | - |
| 11 | 27 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 54 |
| 11 | 28 | 61 | 4.0 | 13.0 | 8.4 | 2.0 | - | - | - | .1 | 21 | 102 | 182 | 1 | 2 | 90 | .4 | - | - |
| 12 | 5 | 61 | 3.0 | 13.3 | 8.4 | .5 | - | - | - | - | 36 | 106 | 204 | 2 | 23 | 150 | .4 | 450 | 100 |
| 12 | 13 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 12 | 18 | 61 | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 19 | 61 | .0 | 11.6 | 7.9 | 1.2 | - | - | - | .5 | 52 | 112 | 164 | 0 | 23 | - | - | - | 430 |
| 12 | 27 | 61 | .0 | 11.6 | 8.1 | 2.0 | - | - | - | .3 | 33 | 126 | 236 | - | 17 | 120 | - | 430 | - |
| 1 | 2 | 62 | .0 | 8.8 | 8.0 | 1.0 | - | - | - | .1 | 53 | 120 | 240 | - | 22 | 112 | - | 480 | - |
| 1 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 530 |
| 1 | 9 | 62 | - | - | 7.9 | 1.8 | - | - | - | .3 | 28 | - | 224 | 1 | 10 | 128 | - | 430 | 51 |
| 1 | 15 | 62 | .0 | 8.8 | 7.7 | 1.3 | - | - | - | .0 | 53 | 124 | 244 | - | 16 | 146 | - | 500 | - |
| 1 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 47 |
| 1 | 23 | 62 | .5 | 10.0 | 8.0 | 1.9 | - | - | - | .8 | 29 | 112 | 236 | - | 11 | 132 | - | 520 | 170 |
| 1 | 31 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1600 |
| 2 | 1 | 62 | .0 | 9.9 | 7.9 | 1.6 | - | - | - | .0 | - | | 250 | - | 4 | 152 | - | - | - |
| 2 | 6 | 62 | .0 | 8.2 | 7.8 | 1.4 | - | - | - | .1 | 24 | 108 | 236 | 2 | 43 | 80 | - | 360 | 1300 |
| 2 | 12 | 62 | 7.0 | 9.3 | 8.0 | 3.9 | 9 | - | - | .0 | 38 | 106 | 224 | - | 3100 | 132 | - | 444 | - |
| 2 | 19 | 62 | 10.0 | - | 7.6 | - | - | - | - | .1 | 37 | 126 | 240 | - | 2575 | - | - | - | 270 |
| 2 | 26 | 62 | 4.0 | 6.9 | 7.7 | 1.0 | - | - | - | .0 | 54 | 120 | 256 | 2 | 164 | 158 | - | 412 | 7700 |
| 3 | 5 | 62 | 3.0 | - | 8.3 | - | - | - | - | .0 | 28 | 114 | 230 | - | 17 | 90 | - | 328 | 85000 |
| 3 | 13 | 62 | 2.0 | 9.7 | 8.2 | 2.5 | 7 | - | - | .1 | 56 | 126 | 256 | - | 36 | 168 | - | 432 | 110 |
| 3 | 19 | 62 | 7.0 | 8.7 | 8.0 | 2.4 | - | - | - | .1 | 28 | 122 | 256 | - | 1300 | 160 | - | 412 | 1700 |
| 3 | 26 | 62 | 4.0 | 8.5 | 8.1 | 2.9 | - | - | - | .0 | 40 | 120 | 250 | 2 | 6750 | 85 | 1.0 | 404 | - |
| 4 | 3 | 62 | 11.0 | 7.4 | 8.1 | 1.6 | - | - | - | .1 | 33 | 110 | 194 | - | 430 | 85 | - | 396 | - |
| 4 | 9 | 62 | 9.0 | 8.2 | 8.0 | 2.1 | - | - | - | .7 | 31 | 108 | 176 | - | 228 | 88 | - | 380 | - |
| 4 | 16 | 62 | 16.0 | 6.3 | 7.8 | 5.0 | - | - | - | .1 | 24 | 94 | 152 | - | 950 | 48 | 1.1 | 292 | 400 |
| 4 | 28 | 62 | 11.0 | 7.3 | 7.8 | .2 | - | - | - | .0 | 20 | 74 | 108 | - | - | - | - | - | - |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 4 | 30 | 62 | 10.0 | 9.2 | 7.8 | 2.4 | - | - | - | .1 | 11 | 70 | 110 | - | 24 | 42 | - | 234 | 32 |
| 5 | 7 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 6000 |
| 5 | 8 | 62 | 12.0 | 8.8 | 7.9 | - | - | - | - | - | 16 | 56 | 84 | - | 236 | 30 | - | 108 | - |
| 5 | 14 | 62 | 10.0 | 7.2 | 7.8 | .6 | 13 | - | - | .1 | 18 | 58 | 94 | 3 | 50 | 38 | - | 156 | - |
| 5 | 21 | 62 | 9.0 | - | 7.8 | - | - | - | - | .1 | 16 | 76 | 118 | - | 38 | 51 | - | 228 | - |
| 5 | 28 | 62 | 11.0 | 5.9 | 7.7 | 4.9 | - | - | - | .1 | 18 | 76 | 114 | - | 63 | 34 | 1.5 | 168 | - |
| 6 | 11 | 62 | 14.0 | 9.0 | 7.9 | 1.3 | - | - | - | .4 | 9 | 56 | 104 | - | 90 | 29 | .7 | 150 | 3400 |
| 6 | 19 | 62 | 18.0 | 5.7 | 7.8 | .8 | - | - | - | .0 | 16 | 64 | 112 | - | 36 | 37 | .5 | 156 | 200 |
| 6 | 25 | 62 | 20.0 | 6.3 | 7.9 | - | - | - | - | .0 | 15 | 56 | 98 | - | 64 | 30 | .4 | 150 | 380 |
| 7 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 290 |
| 7 | 3 | 62 | 17.0 | 6.8 | 8.0 | .7 | - | - | - | .0 | 19 | 48 | 92 | 2 | 48 | 32 | .5 | 160 | - |
| 7 | 9 | 62 | - | - | - | - | 2 | - | - | - | - | - | - | - | - | - | - | - | 480 |
| 7 | 10 | 62 | 19.0 | - | 8.5 | - | - | - | - | .0 | 15 | 62 | 132 | 2 | 10 | 57 | - | 210 | - |
| 7 | 16 | 62 | 16.0 | - | 8.8 | - | - | - | - | .5 | 27 | 70 | 134 | 1 | 2 | 55 | - | 250 | 240 |
| 7 | 23 | 62 | 19.0 | 9.1 | 8.5 | .1 | - | - | - | .0 | 20 | 74 | 152 | - | 7 | 60 | - | 280 | 590 |
| 7 | 30 | 62 | 18.0 | 6.0 | 8.6 | 1.5 | - | - | - | .0 | 37 | 88 | 170 | - | 2 | 76 | - | 330 | - |
| 7 | 31 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2400 |
| 8 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4600 |
| 8 | 8 | 62 | 16.0 | 9.4 | 8.6 | 2.9 | - | - | - | .0 | 36 | 100 | 194 | 1 | 12 | 74 | - | 410 | - |
| 8 | 13 | 62 | 21.0 | 10.6 | 8.7 | 2.2 | - | - | - | .1 | 47 | 112 | 200 | - | 18 | 120 | - | 440 | 50 |
| 8 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 220 |
| 8 | 21 | 62 | 19.0 | 8.3 | 8.8 | .0 | - | - | - | .0 | 42 | 120 | 220 | - | 4 | 108 | - | 460 | - |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 440 |
| 8 | 28 | 62 | 17.0 | 10.0 | 8.5 | 1.8 | - | - | - | .0 | 50 | 140 | 248 | - | - | 100 | - | 520 | - |
| 9 | 4 | 62 | 20.0 | 8.3 | 8.5 | .8 | - | - | - | - | 46 | 160 | 276 | - | - | 93 | - | 600 | 10 |
| 9 | 10 | 62 | - | - | - | - | 7 | - | - | - | - | - | - | - | - | - | - | - | 300 |
| 9 | 11 | 62 | 13.0 | 10.5 | 8.5 | 2.3 | - | - | - | .0 | 58 | 150 | 278 | - | 13 | 112 | - | 510 | - |
| 9 | 18 | 62 | 16.0 | 8.7 | 8.4 | 1.8 | - | - | - | .0 | 52 | 156 | 274 | - | - | 120 | - | 554 | 1000 |
| 9 | 24 | 62 | 18.0 | 9.1 | 8.1 | 2.2 | - | - | - | .0 | 40 | 92 | 172 | - | 28 | 90 | - | 380 | 6800 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Cedar Hill, New Mexico
Operated by U.S. Geological Survey

MAJOR BASIN Colorado River

MINOR BASIN San Juan River

STATION LOCATION Animas River at
Cedar Hill, New Mexico

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .598 | .480 | .350 | .210 | .250 | .290 | .535 | 1.660 | 1.620 | 2.940 | .680 | .278 |
| 2 | .508 | .460 | .350 | .200 | .260 | .320 | .577 | 1.630 | 1.890 | 2.550 | .639 | .260 |
| 3 | .467 | .434 | .340 | .200 | .270 | .310 | .650 | 1.730 | 2.310 | 2.240 | .607 | .251 |
| 4 | .448 | .373 | .330 | .210 | .290 | .310 | .704 | 2.100 | 2.340 | 2.120 | .577 | .247 |
| 5 | .422 | .385 | .320 | .210 | .290 | .320 | .738 | 2.680 | 2.660 | 1.990 | .567 | .234 |
| 6 | .397 | .373 | .300 | .210 | .320 | .320 | .752 | 2.980 | 2.920 | 1.850 | .531 | .230 |
| 7 | .373 | .355 | .290 | .230 | .320 | .320 | .796 | 3.370 | 3.220 | 1.850 | .514 | .230 |
| 8 | .367 | .367 | .290 | .230 | .340 | .320 | .804 | 3.560 | 2.760 | 1.770 | .483 | .265 |
| 9 | .759 | .379 | .290 | .230 | .340 | .310 | .773 | 3.820 | 2.880 | 1.700 | .464 | .265 |
| 10 | .666 | .403 | .270 | .200 | .340 | .300 | .738 | 4.230 | 3.210 | 1.590 | .449 | .251 |
| 11 | .522 | .385 | .250 | .150 | .350 | .290 | .704 | 4.340 | 3.320 | 1.520 | .434 | .247 |
| 12 | .529 | .391 | .240 | .200 | .370 | .280 | .710 | 4.440 | 3.560 | 1.480 | .430 | .238 |
| 13 | .543 | .403 | .240 | .230 | .380 | .290 | .887 | 4.140 | 3.650 | 1.480 | .430 | .230 |
| 14 | .574 | .397 | .250 | .230 | .380 | .280 | 1.200 | 3.540 | 3.730 | 1.330 | .430 | .230 |
| 15 | .622 | .385 | .280 | .220 | .350 | .300 | 1.630 | 2.760 | 3.270 | 1.180 | .394 | .230 |
| 16 | .675 | .403 | .280 | .210 | .350 | .300 | 2.120 | 2.200 | 2.570 | 1.080 | .405 | .226 |
| 17 | .711 | .397 | .250 | .220 | .350 | .300 | 2.380 | 1.850 | 2.020 | 1.020 | .367 | .226 |
| 18 | .729 | .403 | .250 | .230 | .340 | .300 | 2.600 | 1.540 | 1.660 | .977 | .357 | .230 |
| 19 | .702 | .380 | .230 | .240 | .320 | .300 | 2.960 | 1.400 | 1.890 | .977 | .360 | .221 |
| 20 | .657 | .380 | .230 | .230 | .330 | .300 | 3.300 | 1.510 | 2.720 | 1.000 | .394 | .247 |
| 21 | .639 | .390 | .240 | .230 | .320 | .310 | 3.290 | 1.760 | 3.140 | .968 | .405 | .335 |
| 22 | .606 | .380 | .230 | .210 | .310 | .300 | 2.640 | 1.620 | 2.970 | .923 | .394 | .480 |
| 23 | .598 | .370 | .220 | .210 | .310 | .310 | 2.330 | 1.530 | 3.000 | .887 | .391 | .550 |
| 24 | .529 | .370 | .210 | .210 | .310 | .320 | 2.550 | 1.730 | 2.760 | .896 | .377 | .448 |
| 25 | .508 | .370 | .210 | .230 | .310 | .350 | 3.110 | 2.060 | 2.670 | .914 | .360 | .428 |
| 26 | .487 | .370 | .210 | .240 | .300 | .400 | 3.110 | 1.850 | 2.610 | .950 | .350 | .409 |
| 27 | .480 | .360 | .210 | .240 | .300 | .450 | 2.700 | 1.950 | 2.700 | .804 | .328 | .434 |
| 28 | .467 | .350 | .200 | .240 | .290 | .460 | 2.580 | 1.930 | 2.670 | .738 | .325 | .508 |
| 29 | .448 | .350 | .210 | .240 |  | .475 | 2.440 | 1.660 | 2.500 | .686 | .310 | .508 |
| 30 | .448 | .350 | .220 | .240 |  | .500 | 2.060 | 1.510 | 2.880 | .674 | .298 | .448 |
| 31 | .494 |  | .220 | .240 |  | .480 |  | 1.510 |  | .692 | .292 |  |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 9 | 61 | 10 | 23 | - | - | - | - | - | - | 1 | 5 | 1 | 6 | 2 | 8 | | | | | | |
| 10 | 18 | 61 | 11 | 1 | - | - | - | - | - | - | 4 | 5 | 4 | 6 | 8 | 8 | | | | | | |
| 11 | 13 | 61 | 11 | 22 | - | - | - | - | - | - | 28 | 11 | 19 | 12 | 47 | 16 | | | | | | |
| 11 | 27 | 61 | 12 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 9 | 4 | 9 | 4 | 18 | 6 | | | | | | |
| 12 | 5 | 61 | 12 | 13 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 4 | 4 | 4 | 5 | 6 | | | | | | |
| 2 | 26 | 62 | 3 | 13 | 1 | 1 | 0 | 0 | 1 | 1 | 28 | 6 | 24 | 6 | 52 | 8 | | | | | | |
| 3 | 5 | 62 | 3 | 19 | 0 | 1 | 0 | 1 | 0 | 1 | 18 | 6 | 19 | 6 | 37 | 9 | | | | | | |
| 3 | 12 | 62 | 3 | 23 | - | - | - | - | - | - | 18 | 6 | 12 | 6 | 30 | 8 | | | | | | |
| 3 | 19 | 62 | 3 | 30 | - | - | - | - | - | - | 26 | 5 | 16 | 4 | 42 | 6 | | | | | | |
| 3 | 29 | 62 | 4 | 12 | - | - | - | - | - | - | 27 | 6 | 20 | 6 | 47 | 8 | | | | | | |
| 4 | 2 | 62 | 4 | 20 | 1 | 1 | 0 | 1 | 1 | 1 | 23 | 5 | 19 | 4 | 42 | 6 | | | | | | |
| 4 | 12 | 62 | 4 | 26 | - | - | - | - | - | - | 31 | 6 | 24 | 6 | 55 | 8 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 38 | 7 | 29 | 6 | 67 | 9 | | | | | | |
| 4 | 23 | 62 | 6 | 16 | - | - | - | - | - | - | 19 | 4 | 26 | 4 | 45 | 6 | | | | | | |
| 5 | 7 | 62 | 6 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 7 | 6 | 10 | 7 | | | | | | |
| 5 | 15 | 62 | 6 | 25 | - | - | - | - | - | - | 5 | 6 | 15 | 8 | 20 | 10 | | | | | | |
| 5 | 23 | 62 | 7 | 25 | - | - | - | - | - | - | 1 | 5 | 3 | 5 | 4 | 7 | | | | | | |
| 6 | 1 | 62 | 7 | 2 | - | - | - | - | - | - | 4 | 5 | 14 | 6 | 18 | 8 | | | | | | |
| 6 | 6 | 62 | 7 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 10 | 5 | 11 | 7 | | | | | | |
| 6 | 12 | 62 | 7 | 10 | - | - | - | - | - | - | 7 | 6 | 14 | 7 | 21 | 9 | | | | | | |
| 6 | 18 | 62 | 7 | 12 | - | - | - | - | - | - | 5 | 6 | 8 | 6 | 13 | 8 | | | | | | |
| 6 | 21 | 62 | 8 | 16 | - | - | - | - | - | - | 3 | 6 | 9 | 8 | 12 | 10 | | | | | | |
| 7 | 16 | 62 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 9 | 6 | 9 | 10 | | | | | | |
| 7 | 31 | 62 | 8 | 17 | - | - | - | - | - | - | 3 | 5 | 12 | 6 | 15 | 7 | | | | | | |
| 8 | 6 | 62 | 8 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 8 | 6 | 10 | 7 | | | | | | |
| 8 | 13 | 62 | 8 | 27 | - | - | - | - | - | - | 3 | 3 | 9 | 3 | 12 | 4 | | | | | | |
| 8 | 20 | 62 | 9 | 5 | - | - | - | - | - | - | 1 | 3 | 7 | 3 | 8 | 4 | | | | | | |
| 9 | 5 | 62 | 9 | 19 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 10 | 5 | 11 | 6 | 15 | | | | | | |
| 9 | 13 | 62 | 10 | 9 | - | - | - | - | - | - | 6 | 5 | 6 | 6 | 12 | 7 | | | | | | |
| 9 | 18 | 62 | 10 | 14 | - | - | - | - | - | - | 3 | 5 | 0 | 6 | 3 | 7 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** FLORIDA
**MAJOR BASIN** SOUTHEAST
**MINOR BASIN** APALACHICOLA RIVER
**STATION LOCATION** APALACHICOLA RIVER AT
CHATTAHOOCHEE, FLORIDA

| DATE OF SAMPLE | | | ALGAE (Number per milliliter) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See te | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 4 | 61 | 600 | 0 | 20 | 310 | 0 | 50 | 0 | 160 | 70 | 310 | 50 | | | | | | | | | | | | | | | | |
| 10 | 18 | 61 | 900 | 60 | 20 | 250 | 0 | 270 | 20 | 270 | 40 | 20 | 20 | 51 | 1 | 68 | 1 | | | | | | | | | | | | |
| 11 | 6 | 61 | 6000 | 220 | 0 | 1250 | 0 | 270 | 450 | 3260 | 540 | 3020 | 110 | 71 | 4 | 68 | 3 | 38 | 2 | 55 | 1 | 57 | 1 | 25 | 1 | | | | |
| 11 | 27 | 61 | 10000 | 0 | 0 | 660 | 0 | 150 | 0 | 8530 | 620 | 3540 | 370 | 68 | 5 | 71 | 5 | 69 | 4 | 88 | 2 | 87 | 1 | | | | | | |
| 12 | 5 | 61 | 1600 | 20 | 0 | 150 | 0 | 150 | 20 | 1180 | 60 | 750 | 80 | 71 | 2 | 68 | 1 | | | | | | | | | | | | |
| 12 | 13 | 61 | 1900 | 100 | 0 | 170 | 0 | 120 | 0 | 1450 | 80 | 600 | 60 | 69 | 3 | 68 | 2 | 71 | 2 | | | | | | | | | | |
| 1 | 5 | 62 | 32100 | 20 | 31640 | 20 | 0 | 230 | 0 | 140 | 70 | 230 | 0 | 15 | 8 | 51 | 1 | | | | | | | | | | | | |
| 1 | 15 | 62 | 200 | 0 | 0 | 0 | 0 | 60 | 60 | 40 | 20 | 0 | 0 | | | | | | | | | | | | | | | | |
| 1 | 22 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | | | | | | | | | | | | | | | | |
| 2 | 8 | 62 | 4500 | 0 | 0 | 20 | 0 | 4470 | 0 | 0 | 0 | 0 | 0 | 57 | 5 | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 100 | 0 | 0 | 0 | 20 | 0 | 0 | 20 | 40 | 0 | 0 | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 00 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 20 | 0 | 0 | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 20 | 0 | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 1400 | 0 | 0 | 40 | 0 | 130 | 190 | 700 | 330 | 120 | 20 | 71 | 3 | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 1300 | 80 | 0 | 130 | 0 | 310 | 130 | 390 | 270 | 150 | 100 | 69 | 1 | 51 | 1 | | | | | | | | | | | | |
| 5 | 10 | 62 | 6400 | 0 | 40 | 440 | 0 | 20 | 510 | 4730 | 700 | 870 | 170 | 69 | 5 | 71 | 4 | 60 | 2 | 92 | 2 | 38 | 1 | | | | | | |
| 5 | 23 | 62 | 1800 | 0 | 230 | 300 | 0 | 60 | 0 | 890 | 300 | 460 | 130 | 68 | 2 | 17 | 1 | 69 | 1 | 71 | 1 | | | | | | | | |
| 6 | 6 | 62 | 5000 | 20 | 0 | 640 | 0 | 3070 | 180 | 970 | 90 | 140 | 20 | 51 | 5 | 68 | 2 | 63 | 1 | 25 | 1 | | | | | | | | |
| 6 | 21 | 62 | 3400 | 660 | 0 | 500 | 0 | 660 | 370 | 830 | 330 | 210 | 40 | 3 | 3 | 51 | 2 | 63 | 1 | 69 | 1 | 25 | 1 | 92 | 1 | 54 | 1 | | |
| 7 | 2 | 62 | 6700 | 1240 | 40 | 3350 | 0 | 4140 | 330 | 830 | 460 | 460 | 40 | 25 | 5 | 3 | 2 | 9 | 2 | 51 | 2 | 2 | 2 | 92 | 2 | 68 | 1 | 71 | 1 |
| 7 | 16 | 62 | 2900 | 60 | 0 | 1390 | 0 | 190 | 60 | 660 | 580 | 290 | 170 | 25 | 3 | 68 | 2 | 38 | 1 | 69 | 1 | 88 | 1 | | | | | | |
| 7 | 31 | 62 | 3200 | 0 | 0 | 850 | 0 | 750 | 0 | 1160 | 460 | 210 | 80 | 68 | 3 | 25 | 3 | 51 | 2 | 69 | 2 | 88 | 1 | | | | | | |
| 8 | 20 | 62 | 5300 | 120 | 170 | 1610 | 0 | 1410 | 250 | 830 | 870 | 370 | 80 | 51 | 4 | 25 | 3 | 68 | 3 | 76 | 2 | 38 | 1 | 17 | 1 | 57 | 1 | 63 | 1 |
| 9 | 5 | 62 | 800 | 50 | 0 | 450 | 0 | 50 | 20 | 50 | 180 | 90 | 70 | | | | | | | | | | | | | | | | |
| 9 | 18 | 62 | 2700 | 0 | 0 | 810 | 0 | 1120 | 210 | 460 | 120 | 460 | 40 | 51 | 3 | 25 | 3 | 68 | 1 | 69 | 1 | 63 | 1 | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (*See text for Codes*) | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA (*Identifiable*) *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (*Identifiable*) *Number per liter* | OTHER ANIMAL FORMS (*Number per liter*) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (*See text for Codes*) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (*See text for Codes*) | | | | | | | |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 4 | 61 | 23 | 28 | 57 | 23 | 56 | 13 | 27 | 12 | 24 | 0 | 0 | 258 | 17 | 5 | 22 | 4 | 16 | 4 | 11 | 3 | 18 | 2 | 4 | 51 | 1 | | | | | 0 | 0 |
| 10 | 18 | 61 | 27 | 23 | 82 | 20 | 23 | 17 | 57 | 16 | 24 | 2050 | 0 | 49 | 17 | 4 | 16 | 3 | 18 | 2 | 11 | 2 | 21 | 1 | 1 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 82 | 46 | 23 | 11 | 58 | 10 | 56 | 10 | 23 | 20 | 0 | 515 | 11 | 5 | 17 | 5 | 22 | 5 | 16 | 4 | 46 | 3 | 6 | 50 | 1 | | | | | 0 | 0 |
| 11 | 27 | 61 | 82 | 30 | 23 | 26 | 58 | 15 | 56 | 10 | 19 | 0 | 0 | 172 | 11 | 4 | 17 | 4 | 21 | 3 | 16 | 2 | | | 1 | | | | | | | 0 | 0 |
| 12 | 5 | 61 | 82 | 27 | 27 | 15 | 58 | 14 | 56 | 14 | 30 | 0 | 0 | 93 | 11 | 3 | 17 | 2 | 21 | 2 | 16 | 1 | 18 | 1 | 3 | 50 | 1 | | | | | 0 | 0 |
| 12 | 13 | 61 | 58 | 25 | 56 | 25 | 57 | 16 | 82 | 7 | 27 | 20 | 10 | 52 | 11 | 3 | 17 | 2 | 22 | 1 | 21 | 1 | | | 2 | | | | | | | 0 | 0 |
| 1 | 5 | 62 | | | | | | | | | | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | | | | | | | | | | 100 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 22 | 62 | | | | | | | | | | 20 | 10 | 3 | | | | | | | | | | | 5 | 50 | 1 | | | | | 0 | 0 |
| 2 | 8 | 62 | | | | | | | | | | 48400 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 150 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 27 | 27 | 57 | 14 | 2 | 8 | 56 | 7 | 44 | 0 | 0 | 1 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | | | | | | | | | | 20 | 0 | 2 | | | | | | | | | | | 8 | 53 | 2 | | | | | 0 | 0 |
| 4 | 2 | 62 | 57 | 32 | 82 | 27 | 61 | 11 | 2 | 5 | 25 | 0 | 10 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 57 | 41 | 82 | 21 | 61 | 8 | 56 | 7 | 23 | 0 | 10 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 10 | 62 | 57 | 55 | 82 | 37 | 56 | 3 | 92 | 1 | 4 | 0 | 0 | 846 | 17 | 6 | 46 | 6 | 22 | 5 | 11 | 5 | 21 | 5 | 12 | 51 | 2 | | | | | 1 | 0 |
| 5 | 23 | 62 | 57 | 45 | 28 | 21 | 82 | 10 | 56 | 6 | 18 | 40 | 10 | 1910 | 7 | 8 | 17 | 7 | 16 | 5 | 2 | 5 | 22 | 5 | 31 | 51 | 3 | 50 | 2 | | | 0 | 0 |
| 6 | 6 | 62 | 27 | 31 | 57 | 25 | 58 | 18 | 92 | 10 | 16 | 20 | 10 | 1120 | 17 | 7 | 18 | 6 | 11 | 4 | 22 | 4 | 7 | 4 | 6 | 51 | 1 | | | | | 0 | 2 |
| 6 | 21 | 62 | 27 | 32 | 57 | 21 | 56 | 14 | 58 | 10 | 23 | 20 | 10 | 843 | 22 | 7 | 15 | 5 | 17 | 5 | 18 | 4 | 7 | 4 | 9 | 50 | 1 | 51 | 1 | | | 0 | 0 |
| 7 | 2 | 62 | 56 | 27 | 57 | 26 | 58 | 18 | 28 | 8 | 21 | 40 | 0 | 1240 | 22 | 7 | 17 | 7 | 18 | 7 | 21 | 3 | 7 | 3 | 4 | 50 | 1 | | | | | 0 | 1 |
| 7 | 16 | 62 | 30 | 45 | 57 | 17 | 56 | 12 | 23 | 7 | 19 | 0 | 0 | 47 | 17 | 2 | 22 | 2 | 2 | 1 | | | | | 3 | | | | | | | 1 | 0 |
| 7 | 31 | 62 | 23 | 45 | 56 | 15 | 57 | 14 | 58 | 6 | 20 | 0 | 0 | 1100 | 22 | 7 | 17 | 7 | 18 | 5 | 15 | 4 | 2 | 4 | 8 | 50 | 1 | | | | | 2 | 0 |
| 8 | 20 | 62 | 23 | 44 | 57 | 16 | 8 | 10 | 56 | 8 | 32 | 0 | 0 | 905 | 22 | 7 | 17 | 5 | 18 | 5 | 7 | 4 | 16 | 4 | 0 | | | | | | | 0 | 0 |
| 9 | 5 | 62 | 57 | 17 | 56 | 15 | 23 | 14 | 8 | 11 | 43 | 0 | 0 | 567 | 22 | 6 | 18 | 5 | 15 | 4 | 17 | 4 | 7 | 4 | 3 | 52 | 1 | | | | | 0 | 0 |
| 9 | 18 | 62 | 23 | 30 | 82 | 12 | 57 | 9 | 56 | 9 | 40 | 0 | 0 | 657 | 22 | 6 | 17 | 6 | 2 | 4 | 18 | 4 | 21 | 3 | 1 | | | | | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

## ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** FLORIDA
**MAJOR BASIN** SOUTHEAST
**MINOR BASIN** APALACHICOLA RIVER
**STATION LOCATION** APALACHICOLA RIVER AT
CHATTAHOOCHEE, FLORIDA 57

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 11 | 17 | 61 | 12 | 13 | 5720 | 90 | 25 | 65 | 0 | 6 | 8 | 1 | 1 | 6 | 0 | 3 | 2 | 1 | 5 |
| 1 | 2 | 62 | 2 | 9 | 3890 | 345 | 127 | 218 | 5 | 34 | 36 | 3 | 3 | 28 | 2 | 20 | 9 | 4 | 19 |
| 2 | 20 | 62 | 3 | 12 | 7390 | 149 | 68 | 81 | 3 | 16 | 14 | 1 | 1 | 11 | 1 | 8 | 7 | 1 | 19 |
| 4 | 3 | 62 | 4 | 23 | 5200 | 203 | 95 | 108 | 9 | 24 | 19 | 1 | 2 | 16 | 0 | 12 | 10 | 1 | 20 |
| 5 | 16 | 62 | 5 | 23 | 5210 | 117 | 58 | 59 | 2 | 17 | 13 | 1 | 1 | 11 | 0 | 7 | 6 | 1 | 12 |
| 6 | 12 | 62 | 6 | 26 | 5290 | * | 72 | * | 4 | 20 | 18 | 1 | 1 | 15 | 1 | 8 | 8 | 1 | 13 |
| 7 | 26 | 62 | 8 | 17 | 5370 | 174 | 62 | 112 | 1 | 16 | 19 | 2 | 1 | 15 | 1 | 8 | 4 | 1 | 13 |
| 9 | 5 | 62 | 9 | 21 | 5640 | 184 | 73 | 111 | 2 | 18 | 18 | 1 | 1 | 15 | 1 | 9 | 7 | 2 | 17 |

* LABORATORY ACCIDENT

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 10 | 61 | 28.0 | 6.6 | 7.2 | - | 19 | - | - | - | 20 | 42 | 40 | 60 | 15 | - | - | 80 | *100 |
| 10 | 16 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 10 | 23 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *100 |
| 10 | 30 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 11 | 6 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3000 |
| 11 | 13 | 61 | 28.0 | 7.2 | 7.2 | - | - | - | - | - | 14 | 44 | 36 | 50 | 20 | 4 | .1 | 90 | *100 |
| 11 | 20 | 61 | 30.0 | 9.0 | 7.1 | 1.4 | - | - | - | - | 14 | 42 | 38 | 60 | 20 | - | - | 80 | 300 |
| 11 | 27 | 61 | 30.0 | 7.4 | 7.2 | - | - | - | - | - | 16 | 42 | 36 | 80 | 20 | 4 | .1 | 85 | 230 |
| 12 | 4 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 12 | 12 | 61 | 30.0 | 7.4 | 7.1 | - | - | - | - | - | 14 | 45 | 40 | 90 | 25 | - | - | 90 | - |
| 12 | 18 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 1 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2500 |
| 1 | 15 | 62 | 30.0 | 4.0 | 6.8 | - | - | - | - | - | 4 | 35 | 32 | 60 | 30 | - | - | 80 | 1800 |
| 1 | 22 | 62 | 30.0 | 4.0 | 6.5 | - | - | - | - | - | 6 | 36 | 34 | 70 | 25 | - | - | 95 | 1800 |
| 1 | 29 | 62 | 26.0 | 6.0 | 6.9 | - | - | - | - | - | 8 | 38 | 36 | 65 | 20 | - | - | 80 | - |
| 2 | 5 | 62 | 24.0 | 6.0 | 6.9 | - | - | - | - | - | 6 | 40 | 38 | 90 | 30 | - | - | 80 | 790 |
| 2 | 9 | 62 | - | - | - | - | 8 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 12 | 62 | 26.0 | 4.0 | 7.0 | - | - | - | - | - | - | 44 | 42 | 60 | 20 | - | - | 85 | *100 |
| 2 | 26 | 62 | 28.0 | 6.5 | 7.0 | - | - | - | - | - | 4 | 38 | 34 | 100 | 25 | - | - | 80 | - |
| 3 | 5 | 62 | 26.0 | 6.5 | 6.3 | .9 | - | - | - | - | 2 | 21 | 26 | 150 | 25 | - | - | 64 | 210 |
| 3 | 12 | 62 | 28.0 | 6.4 | 6.4 | 1.0 | 8 | - | - | - | 4 | 22 | 28 | 125 | 20 | 4 | .4 | 70 | *100 |
| 3 | 26 | 62 | 20.0 | 8.7 | 6.6 | - | - | - | - | - | 6 | 24 | 30 | 150 | 20 | - | - | 80 | 100 |
| 4 | 2 | 62 | 24.0 | 6.0 | 6.8 | - | - | - | - | - | 4 | 22 | 28 | 120 | 20 | - | - | 80 | *100 |
| 4 | 9 | 62 | 30.0 | 7.5 | 6.7 | - | - | - | - | - | 6 | 24 | 28 | 100 | 20 | - | - | 65 | 1700 |
| 4 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 13 | .0 | - | 200 |
| 4 | 23 | 62 | - | - | - | - | 20 | - | - | - | - | - | - | - | - | 13 | .0 | - | *100 |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *100 |
| 5 | 8 | 62 | 26.0 | 8.2 | 6.7 | .7 | - | - | - | - | 3 | 47 | 36 | 100 | 20 | - | - | 85 | *100 |
| 5 | 28 | 62 | 30.0 | 7.6 | 7.4 | - | - | - | - | - | 6 | 46 | 40 | 90 | 20 | - | - | 80 | - |
| 5 | 14 | 62 | 28.0 | 7.6 | 7.2 | - | - | - | - | - | 4 | 44 | 38 | 100 | 20 | 6 | .0 | 90 | - |
| 5 | 21 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 5 | .0 | - | *100 |
| 6 | 1 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 4 | .0 | - | - |
| 6 | 11 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *100 |
| 6 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 6 | - | - | - |
| 6 | 18 | 62 | 30.0 | 7.6 | 7.2 | - | - | - | - | - | 4 | 44 | 42 | 100 | 20 | - | - | 90 | - |
| 6 | 25 | 62 | 28.0 | 7.0 | 7.4 | - | - | - | - | - | 6 | 44 | 38 | 90 | 20 | - | - | 80 | *100 |
| 7 | 2 | 62 | 30.0 | 7.2 | 7.4 | - | - | - | - | - | 3 | 46 | 38 | 90 | 20 | - | - | 80 | *100 |
| 7 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 3 | .0 | - | - |
| 7 | 31 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *100 |

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

| | |
|---|---|
| **STATE** | FLORIDA |
| **MAJOR BASIN** | SOUTHEAST |
| **MINOR BASIN** | APALACHICOLA RIVER |
| **STATION LOCATION** | APALACHICOLA RIVER AT<br>CHATTAHOOCHEE, FLORIDA |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLI per 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 8 | 6 | 62 | 30.0 | 6.5 | 7.4 | - | - | - | - | - | 4 | 44 | 40 | 80 | 20 | - | - | 100 | * |
| 8 | 20 | 62 | 32.0 | 7.0 | 7.2 | - | - | - | - | - | 6 | 46 | 38 | 100 | 20 | 4 | .0 | 90 | |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | * |
| 9 | 4 | 62 | 30.0 | 7.0 | 7.2 | - | - | - | - | - | 4 | 48 | 42 | 120 | 20 | - | - | 85 | |
| 9 | 10 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | * |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 9 | 18 | 62 | 30.0 | 7.0 | 7.4 | - | - | - | - | - | 6 | 56 | 48 | 140 | 20 | - | - | 90 | |
| 9 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | * |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Chattahoochee, Florida
Operated by U.S. Geological Survey

MAJOR BASIN Southeast

MINOR BASIN Apalachicola River

STATION LOCATION Apalachicola River at Chattahoochee, Florida

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.810 | 7.700 | 9.830 | 20.100 | 29.300 | 49.200 | 49.400 | 34.700 | 12.100 | 11.600 | 9.890 | 9.720 |
| 2 | 8.830 | 8.480 | 10.100 | 20.000 | 28.300 | 49.200 | 62.800 | 33.700 | 10.700 | 10.800 | 9.800 | 10.700 |
| 3 | 8.800 | 8.720 | 10.100 | 20.500 | 29.300 | 50.900 | 69.300 | 26.900 | 10.800 | 12.800 | 10.700 | 9.230 |
| 4 | 8.690 | 8.410 | 10.100 | 21.300 | 28.200 | 49.100 | 65.100 | 22.700 | 12.900 | 15.100 | 10.600 | 8.930 |
| 5 | 8.400 | 8.620 | 10.200 | 20.500 | 26.300 | 47.900 | 56.400 | 23.700 | 14.700 | 16.700 | 10.600 | 10.100 |
| 6 | 8.370 | 8.010 | 9.660 | 31.100 | 24.200 | 44.700 | 49.200 | 23.800 | 14.300 | 15.700 | 10.500 | 9.630 |
| 7 | 8.080 | 7.890 | 9.170 | 47.600 | 21.600 | 39.800 | 48.800 | 21.500 | 15.300 | 13.900 | 10.800 | 9.800 |
| 8 | 8.770 | 8.180 | 9.880 | 48.100 | 20.200 | 35.300 | 56.900 | 20.900 | 16.400 | 13.100 | 11.100 | 10.200 |
| 9 | 9.170 | 7.980 | 10.300 | 47.200 | 21.300 | 36.200 | 57.700 | 21.400 | 16.100 | 16.300 | 12.000 | 9.250 |
| 10 | 7.710 | 7.880 | 11.200 | 45.500 | 23.200 | 35.000 | 56.300 | 21.100 | 13.400 | 18.200 | 11.500 | 9.190 |
| 11 | 9.030 | 7.920 | 9.930 | 41.900 | 21.700 | 33.500 | 52.700 | 20.700 | 12.800 | 16.600 | 10.600 | 9.270 |
| 12 | 8.320 | 9.830 | 15.100 | 35.200 | 18.700 | 39.300 | 53.200 | 20.200 | 14.600 | 13.900 | 10.500 | 9.250 |
| 13 | 11.000 | 8.490 | 28.300 | 34.100 | 16.500 | 51.800 | 61.000 | 19.000 | 15.600 | 13.500 | 9.950 | 9.230 |
| 14 | 8.100 | 8.290 | 39.400 | 34.000 | 16.200 | 58.600 | 67.400 | 15.800 | 18.300 | 13.100 | 9.680 | 9.270 |
| 15 | 7.940 | 8.270 | 50.600 | 33.300 | 16.600 | 60.100 | 73.400 | 12.500 | 20.200 | 13.200 | 9.760 | 9.190 |
| 16 | 8.160 | 8.250 | 62.000 | 27.500 | 18.400 | 55.400 | 76.000 | 12.500 | 19.800 | 11.900 | 9.700 | 10.200 |
| 17 | 8.040 | 8.370 | 65.000 | 26.000 | 20.200 | 48.600 | 64.700 | 13.500 | 18.200 | 12.800 | 9.660 | 9.300 |
| 18 | 8.400 | 9.080 | 66.100 | 24.800 | 20.200 | 47.300 | 52.400 | 15.200 | 16.900 | 12.100 | 10.200 | 9.300 |
| 19 | 8.880 | 8.590 | 58.700 | 24.600 | 26.600 | 46.700 | 49.100 | 14.800 | 13.600 | 10.700 | 10.000 | 9.820 |
| 20 | 8.570 | 8.380 | 49.700 | 28.000 | 38.300 | 45.300 | 46.900 | 14.400 | 13.200 | 10.700 | 10.100 | 9.630 |
| 21 | 7.800 | 9.200 | 48.700 | 33.700 | 42.200 | 42.900 | 45.100 | 14.400 | 13.500 | 12.800 | 10.500 | 9.320 |
| 22 | 7.410 | 8.460 | 48.500 | 34.800 | 38.800 | 39.500 | 42.200 | 14.400 | 15.300 | 11.100 | 10.500 | 9.340 |
| 23 | 7.040 | 8.480 | 43.300 | 35.100 | 40.200 | 36.600 | 36.200 | 14.400 | 16.800 | 10.700 | 10.100 | 10.300 |
| 24 | 7.590 | 9.610 | 38.600 | 34.400 | 47.800 | 32.800 | 32.200 | 14.200 | 16.600 | 11.400 | 10.100 | 10.400 |
| 25 | 7.340 | 9.700 | 31.800 | 31.400 | 57.300 | 32.100 | 33.600 | 13.100 | 15.600 | 9.820 | 10.100 | 8.890 |
| 26 | 7.410 | 9.720 | 30.600 | 31.300 | 60.000 | 32.200 | 32.900 | 12.000 | 14.400 | 9.760 | 10.100 | 9.700 |
| 27 | 8.490 | 9.700 | 30.200 | 35.800 | 59.700 | 33.600 | 31.200 | 13.500 | 14.500 | 11.500 | 9.870 | 8.550 |
| 28 | 7.880 | 9.610 | 27.700 | 36.600 | 53.800 | 31.800 | 28.800 | 10.500 | 14.200 | 10.100 | 9.610 | 9.150 |
| 29 | 7.640 | 9.610 | 22.300 | 35.600 |  | 31.800 | 30.800 | 10.400 | 13.800 | 9.820 | 9.360 | 8.980 |
| 30 | 9.020 | 9.770 | 20.200 | 33.600 |  | 31.700 | 32.900 | 12.600 | 13.000 | 11.000 | 11.400 | 9.570 |
| 31 | 9.000 |  | 20.000 | 31.700 |  | 34.800 |  | 11.800 |  | 10.500 | 9.840 |  |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** ARKANSAS

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** ARKANSAS RIVER VAN BUREN TO MOUTH

**STATION LOCATION** ARKANSAS RIVER AT
PENDLETON FERRY, ARKANSAS 52

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 300 | 0 | 0 | 20 | 0 | 40 | 0 | 170 | 80 | 20 | 170 | | | | | | | | | | | | | | | | | | | | |
| 10 | 9 | 61 | 200 | 0 | 0 | 40 | 0 | 20 | 0 | 160 | 0 | 70 | 160 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 400 | 0 | 0 | 60 | 0 | 130 | 20 | 120 | 80 | 150 | 40 | | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 8800 | 0 | 0 | 640 | 0 | 640 | 0 | 6940 | 540 | 1510 | 150 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 400 | 0 | 0 | 20 | 0 | 180 | 20 | 90 | 110 | 20 | 250 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 100 | 0 | 0 | 20 | 0 | 0 | 0 | 20 | 100 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 100 | 0 | 0 | 20 | 0 | 0 | 0 | 60 | 60 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 1 | 29 | 62 | 700 | 0 | 0 | 20 | 0 | 110 | 50 | 230 | 290 | 20 | 20 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 600 | 0 | 20 | 0 | 0 | 90 | 0 | 410 | 110 | 20 | 20 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 700 | 0 | 0 | 0 | 0 | 320 | 0 | 140 | 270 | 20 | 20 | 51 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 1100 | 0 | 0 | 20 | 0 | 110 | 50 | 690 | 200 | 50 | 160 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 3 | 26 | 62 | 31500 | 830 | 40 | 370 | 0 | 1330 | 250 | 26660 | 2030 | 9850 | 290 | 71 | 8 | 4 | 3 | 92 | 3 | 57 | 3 | 51 | 2 | 25 | 1 | 69 | 1 | 63 | 1 | 93 | 1 | | |
| 4 | 16 | 62 | 17100 | 370 | 0 | 4600 | * | 1200 | 80 | 5340 | 1350 | 6090 | 580 | 50 | 5 | 25 | 5 | 68 | 5 | 71 | 4 | 51 | 3 | 57 | 2 | 69 | 2 | 92 | 2 | 88 | 2 | 3 | 2 |
| 4 | 23 | 62 | 4800 | 230 | 0 | 520 | 160 | 750 | 100 | 2300 | 770 | 970 | 250 | 71 | 4 | 68 | 2 | 51 | 2 | 92 | 1 | 74 | 1 | 57 | 1 | 25 | 1 | 50 | 1 | | | | |
| *4 | 16 | 62 | | | | | 4140 | | | | | | | | | | | | | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** ARKANSAS

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** ARKANSAS RIVER-VAN BUREN TO MOUTH

**STATION LOCATION** ARKANSAS RIVER AT
PENDLETON FERRY, ARKANSAS 52

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 4 | 61 | 10 | 14 | - | - | - | - | - | - | 90 | 41 | 15 | 8 | 105 | 42 | | | | | | |
| 10 | 9 | 61 | 10 | 25 | - | - | - | - | - | - | 12 | 34 | 4 | 7 | 16 | 38 | | | | | | |
| 10 | 16 | 61 | 10 | 30 | - | - | - | - | - | - | 22 | 17 | 11 | 13 | 33 | 20 | | | | | | |
| 10 | 23 | 61 | 11 | 2 | 7 | 4 | 1 | 1 | 8 | 4 | 31 | 9 | 20 | 6 | 51 | 11 | | | | | | |
| 10 | 30 | 61 | 11 | 9 | - | - | - | - | - | - | 42 | 17 | 23 | 12 | 65 | 21 | | | | | | |
| 11 | 6 | 61 | 11 | 22 | - | - | - | - | - | - | 90 | 20 | 38 | 14 | 128 | 24 | | | | | | |
| 11 | 13 | 61 | 11 | 29 | - | - | - | - | - | - | 120 | 15 | 31 | 8 | 151 | 17 | | | | | | |
| 11 | 20 | 61 | 12 | 12 | - | - | - | - | - | - | 37 | 12 | 49 | 14 | 86 | 18 | | | | | | |
| 11 | 27 | 61 | 12 | 11 | 7 | 4 | 0 | 0 | 7 | 4 | 87 | 11 | 9 | 5 | 96 | 13 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | - | - | - | - | - | - | 28 | 6 | 32 | 6 | 60 | 8 | | | | | | |
| 12 | 18 | 61 | 12 | 29 | 3 | 2 | 1 | 1 | 4 | 2 | 47 | 9 | 36 | 8 | 83 | 12 | | | | | | |
| 1 | 8 | 62 | 1 | 19 | - | - | - | - | - | - | 56 | 16 | 34 | 14 | 90 | 21 | | | | | | |
| 1 | 29 | 62 | 2 | 9 | 2 | 2 | 0 | 1 | 2 | 2 | 85 | 9 | 43 | 8 | 128 | 12 | | | | | | |
| 2 | 5 | 62 | 2 | 14 | - | - | - | - | - | - | 94 | 18 | 25 | 14 | 119 | 23 | | | | | | |
| 2 | 12 | 62 | 2 | 23 | - | - | - | - | - | - | 151 | 20 | 41 | 19 | 192 | 28 | | | | | | |
| 2 | 19 | 62 | 3 | 5 | - | - | - | - | - | - | 77 | 16 | 44 | 14 | 121 | 21 | | | | | | |
| 2 | 26 | 62 | 3 | 14 | 2 | 4 | 3 | 2 | 5 | 4 | 91 | 15 | 33 | 10 | 124 | 18 | | | | | | |
| 3 | 5 | 62 | 3 | 14 | - | - | - | - | - | - | 108 | 12 | 31 | 7 | 139 | 14 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | - | - | - | - | - | - | 76 | 9 | 33 | 8 | 109 | 12 | | | | | | |
| 3 | 26 | 62 | 4 | 5 | 1 | 3 | 0 | 2 | 1 | 4 | 116 | 14 | 49 | 11 | 165 | 18 | | | | | | |
| 4 | 2 | 62 | 4 | 19 | - | - | - | - | - | - | 194 | 16 | 49 | 5 | 243 | 18 | | | | | | |
| 4 | 16 | 62 | 5 | 1 | - | - | - | - | - | - | 12 | 12 | 23 | 15 | 35 | 19 | | | | | | |
| 4 | 23 | 62 | 4 | 30 | 2 | 2 | 2 | 2 | 4 | 3 | 55 | 10 | 39 | 11 | 94 | 15 | | | | | | |
| 4 | 30 | 62 | 6 | 25 | - | - | - | - | - | - | 300 | 48 | 34 | 7 | 334 | 49 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** ARKANSAS

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** ARKANSAS RIVER VAN BUREN TO MOUTH

**STATION LOCATION** ARKANSAS RIVER AT

PENDLETON FERRY, ARKANSAS 52

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 3 | 61 | - | 8.0 | 7.0 | - | 29 | 2.1 | 8.4 | - | 49 | 110 | 149 | 25 | 310 | 28 | .0 | - | - |
| 10 | 9 | 61 | 21.0 | 8.3 | 7.0 | 3.0 | 44 | 1.0 | 5.4 | - | 52 | 220 | 149 | 120 | 270 | 28 | .0 | - | 4600 |
| 10 | 16 | 61 | 21.0 | 7.5 | 7.8 | 2.1 | - | .8 | 1.9 | - | 77 | 110 | 179 | 25 | 240 | 36 | .0 | 382 | 1600 |
| 10 | 23 | 61 | 20.0 | 7.9 | 7.7 | - | - | 2.1 | 4.1 | - | 48 | 94 | 168 | 120 | 620 | 30 | .0 | 327 | - |
| 10 | 30 | 61 | - | 7.7 | 7.7 | 1.5 | - | .9 | 3.8 | - | 60 | 112 | 164 | 60 | 312 | 33 | .0 | 297 | - |
| 11 | 6 | 61 | 13.0 | 9.2 | 7.9 | 3.0 | 25 | - | - | - | 98 | 124 | 188 | 50 | 144 | 51 | .0 | 449 | - |
| 11 | 13 | 61 | 14.0 | 9.1 | 7.4 | 4.0 | 54 | - | - | - | 40 | 86 | 123 | 80 | 520 | 42 | .0 | - | - |
| 11 | 20 | 61 | 11.0 | 10.6 | 7.7 | 1.2 | 32 | - | - | - | 101 | 116 | 175 | 35 | 174 | 55 | .0 | 362 | - |
| 11 | 27 | 61 | 10.0 | 8.5 | 7.7 | 2.7 | 51 | - | - | - | 40 | 68 | 104 | 105 | 336 | 34 | .0 | 224 | - |
| 12 | 4 | 61 | 11.0 | 9.9 | 7.4 | 3.4 | 47 | - | - | - | 68 | 74 | 110 | 80 | 174 | 36 | .0 | 252 | 15000 |
| 12 | 18 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 42000 |
| 1 | 8 | 62 | 5.0 | 9.4 | 7.7 | 3.8 | 23 | - | - | - | 119 | 132 | - | 50 | 186 | 47 | .0 | 324 | 11000 |
| 1 | 29 | 62 | 6.0 | 11.6 | 7.0 | 4.4 | - | - | - | - | 52 | 62 | 74 | 80 | 210 | 33 | .0 | 216 | 8000 |
| 2 | 5 | 62 | 9.0 | 10.6 | 7.6 | 3.4 | 66 | - | - | - | 118 | 96 | 170 | 70 | 225 | 57 | .0 | 385 | 12000 |
| 2 | 12 | 62 | 12.0 | 10.5 | 7.4 | 4.5 | 28 | - | - | - | 112 | 102 | 166 | 40 | 264 | 51 | .0 | 366 | 9000 |
| 2 | 19 | 62 | 12.0 | - | 7.0 | - | 33 | - | - | - | 113 | 84 | 160 | 25 | 174 | 58 | .0 | 377 | - |
| 2 | 26 | 62 | 12.0 | 10.1 | 7.4 | 3.6 | 59 | - | - | - | 86 | 86 | 146 | 25 | 210 | 64 | .0 | 278 | 5700 |
| 3 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2000 |
| 3 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 6000 |
| 3 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2400 |
| 4 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 6200 |
| 4 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 8300 |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 7000 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Little Rock, Arkansas
Operated by U.S. Geological Survey

STATE Arkansas

MAJOR BASIN Southwest-Lower Mississippi River

MINOR BASIN Arkansas River-Van Buren to Mouth

STATION LOCATION Arkansas River at

Pendleton Ferry, Arkansas

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 70.000 | 20.300 | 70.000 | 87.000 | 53.500 | 85.300 | 81.700 | 51.100 | 6.220 | 17.800 | 21.400 | 6.100 |
| 2 | 76.000 | 18.400 | 62.900 | 34.200 | 55.100 | 79.900 | 79.900 | 41.900 | 6.400 | 16.800 | 19.800 | 7.000 |
| 3 | 74.000 | 18.800 | 55.700 | 32.800 | 58.300 | 72.700 | 75.400 | 39.100 | 6.220 | 15.800 | 19.800 | 9.050 |
| 4 | 69.100 | 22.300 | 50.900 | 30.700 | 60.100 | 67.300 | 70.000 | 38.400 | 6.590 | 14.300 | 19.800 | 10.200 |
| 5 | 69.100 | 32.500 | 49.300 | 30.000 | 62.800 | 61.900 | 64.600 | 35.600 | 11.100 | 12.800 | 18.300 | 10.600 |
| 6 | 69.100 | 71.000 | 52.500 | 30.700 | 62.800 | 56.700 | 58.300 | 32.800 | 20.300 | 14.800 | 17.800 | 11.000 |
| 7 | 62.100 | 135.000 | 57.300 | 34.200 | 59.200 | 52.700 | 50.300 | 29.300 | 33.500 | 16.300 | 17.800 | 9.400 |
| 8 | 55.700 | 149.000 | 55.700 | 34.900 | 55.100 | 48.200 | 44.700 | 24.500 | 44.000 | 16.300 | 17.800 | 9.400 |
| 9 | 51.700 | 130.000 | 54.900 | 35.600 | 51.100 | 46.100 | 41.900 | 20.300 | 43.300 | 14.300 | 21.400 | 18.800 |
| 10 | 45.800 | 109.000 | 68.200 | 34.900 | 48.200 | 46.100 | 38.400 | 17.800 | 49.600 | 13.800 | 26.400 | 23.600 |
| 11 | 38.800 | 94.300 | 94.300 | 33.500 | 46.100 | 44.000 | 33.500 | 16.300 | 67.300 | 16.300 | 26.400 | 23.100 |
| 12 | 32.500 | 80.000 | 96.500 | 32.100 | 43.300 | 41.900 | 30.700 | 15.800 | 70.900 | 16.800 | 23.600 | 22.000 |
| 13 | 31.200 | 68.200 | 91.000 | 30.700 | 41.200 | 39.100 | 28.100 | 15.400 | 81.700 | 13.800 | 19.800 | 18.800 |
| 14 | 33.200 | 57.300 | 86.600 | 29.300 | 37.000 | 35.600 | 28.100 | 14.500 | 104.000 | 14.300 | 17.300 | 24.800 |
| 15 | 57.300 | 50.100 | 85.500 | 30.700 | 34.200 | 31.400 | 37.700 | 13.200 | 97.000 | 19.800 | 15.800 | 33.500 |
| 16 | 99.800 | 49.300 | 78.000 | 39.100 | 34.900 | 29.300 | 46.100 | 12.100 | 83.600 | 26.800 | 12.400 | 32.300 |
| 17 | 102.000 | 50.100 | 72.000 | 47.500 | 34.200 | 26.300 | 46.100 | 10.500 | 69.100 | 27.500 | 10.600 | 28.700 |
| 18 | 92.100 | 48.600 | 76.000 | 47.500 | 33.500 | 22.700 | 41.200 | 9.350 | 55.100 | 25.300 | 11.900 | 25.300 |
| 19 | 80.000 | 50.900 | 85.500 | 41.900 | 33.500 | 20.900 | 34.900 | 9.350 | 46.100 | 22.600 | 13.300 | 26.400 |
| 20 | 67.300 | 65.500 | 91.000 | 37.000 | 34.900 | 19.800 | 29.300 | 9.350 | 40.500 | 20.900 | 12.800 | 48.200 |
| 21 | 56.500 | 79.000 | 96.500 | 34.900 | 35.600 | 20.300 | 25.700 | 9.080 | 33.500 | 20.900 | 11.400 | 63.700 |
| 22 | 49.300 | 89.900 | 95.400 | 40.500 | 34.900 | 24.500 | 25.700 | 8.560 | 28.700 | 18.800 | 10.200 | 60.100 |
| 23 | 45.800 | 123.000 | 82.200 | 50.300 | 35.600 | 30.000 | 26.900 | 8.060 | 35.700 | 16.800 | 8.350 | 47.500 |
| 24 | 41.600 | 161.000 | 73.000 | 61.000 | 45.400 | 37.000 | 25.700 | 7.180 | 23.300 | 17.800 | 7.300 | 43.000 |
| 25 | 37.400 | 151.000 | 67.300 | 61.000 | 61.900 | 51.100 | 26.900 | 6.590 | 23.300 | 20.400 | 7.300 | 47.500 |
| 26 | 33.900 | 140.000 | 62.900 | 57.500 | 71.800 | 63.700 | 51.100 | 6.590 | 24.500 | 21.400 | 8.350 | 47.500 |
| 27 | 30.600 | 130.000 | 58.100 | 55.100 | 91.400 | 67.300 | 79.000 | 6.980 | 22.700 | 19.800 | 8.700 | 44.900 |
| 28 | 27.000 | 114.000 | 52.500 | 56.700 | 93.600 | 74.500 | 76.300 | 6.980 | 18.300 | 21.400 | 8.000 | 45.600 |
| 29 | 24.600 | 97.600 | 47.900 | 56.700 |  | 87.300 | 68.200 | 6.780 | 16.300 | 27.500 | 7.650 | 46.200 |
| 30 | 22.800 | 81.100 | 44.400 | 55.100 |  | 86.300 | 61.900 | 6.590 | 17.800 | 28.100 | 6.700 | 45.600 |
| 31 | 22.300 |  | 40.200 | 55.100 |  | 83.500 |  | 6.590 |  | 24.800 | 5.500 |  |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 5 | 28 | 62 | 6 | 11 | 5320 | 134 | 58 | 76 | 1 | 14 | 22 | 3 | 2 | 17 | 0 | 8 | 4 | 1 | 8 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** OKLAHOMA

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** ARK. RIVER, KANS-COLO LINE TO TULSA

**STATION LOCATION** ARKANSAS RIVER NEAR

PONCA CITY, OKLAHOMA 1

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 15 | - | - | - | - | - | - | 49 | 18 | 95 | 21 | 144 | 28 | | | | | | |
| 10 | 9 | 61 | 10 | 18 | - | - | - | - | - | - | 24 | 23 | 39 | 27 | 63 | 35 | | | | | | |
| 10 | 16 | 61 | 10 | 31 | - | - | - | - | - | - | 173 | 31 | 23 | 13 | 196 | 33 | | | | | | |
| 10 | 23 | 61 | 11 | 1 | 2 | 3 | 10 | 6 | 12 | 7 | 61 | 24 | 39 | 25 | 100 | 35 | | | | | | |
| 10 | 30 | 61 | 11 | 20 | - | - | - | - | - | - | 18 | 21 | 46 | 28 | 64 | 35 | | | | | | |
| 11 | 6 | 61 | 11 | 27 | - | - | - | - | - | - | 108 | 10 | 116 | 9 | 224 | 13 | | | | | | |
| 11 | 13 | 61 | 11 | 22 | - | - | - | - | - | - | 138 | 25 | 77 | 27 | 215 | 37 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | - | - | - | - | - | - | 191 | 20 | 84 | 15 | 275 | 25 | | | | | | |
| 11 | 27 | 61 | 12 | 5 | 1 | 3 | 4 | 4 | 5 | 5 | 14 | 18 | 52 | 22 | 66 | 40 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | - | - | - | - | - | - | 53 | 28 | 63 | 35 | 116 | 45 | | | | | | |
| 12 | 11 | 61 | 12 | 19 | - | - | - | - | - | - | 51 | 25 | 67 | 29 | 118 | 38 | | | | | | |
| 12 | 18 | 61 | 12 | 27 | - | - | - | - | - | - | 63 | 25 | 78 | 30 | 141 | 39 | | | | | | |
| 12 | 26 | 61 | 1 | 3 | 0 | 2 | 0 | 4 | 0 | 4 | 14 | 16 | 38 | 21 | 52 | 26 | | | | | | |
| 1 | 2 | 62 | 1 | 10 | - | - | - | - | - | - | 15 | 28 | 2 | 34 | 17 | 44 | | | | | | |
| 1 | 8 | 62 | 1 | 17 | - | - | - | - | - | - | 30 | 28 | 16 | 35 | 46 | 45 | | | | | | |
| 1 | 15 | 62 | 1 | 22 | - | - | - | - | - | - | 37 | 28 | 38 | 35 | 75 | 45 | | | | | | |
| 1 | 22 | 62 | 1 | 30 | 0 | 2 | 5 | 7 | 5 | 7 | 27 | 26 | 67 | 36 | 94 | 45 | | | | | | |
| 1 | 29 | 62 | 2 | 12 | - | - | - | - | - | - | 308 | 25 | 87 | 17 | 395 | 30 | | | | | | |
| 2 | 5 | 62 | 2 | 13 | - | - | - | - | - | - | 157 | 21 | 53 | 14 | 210 | 25 | | | | | | |
| 2 | 12 | 62 | 2 | 27 | - | - | - | - | - | - | 12 | 29 | 52 | 37 | 64 | 47 | | | | | | |
| 2 | 19 | 62 | 3 | 2 | - | - | - | - | - | - | 133 | 26 | 49 | 21 | 182 | 33 | | | | | | |
| 2 | 26 | 62 | 3 | 6 | 0 | 3 | 2 | 4 | 2 | 5 | 47 | 22 | 78 | 27 | 125 | 35 | | | | | | |
| 3 | 5 | 62 | 3 | 14 | - | - | - | - | - | - | 19 | 24 | 50 | 30 | 69 | 38 | | | | | | |
| 3 | 12 | 62 | 3 | 23 | - | - | - | - | - | - | 12 | 29 | 1 | 35 | 13 | 45 | | | | | | |
| 3 | 19 | 62 | 4 | 2 | - | - | - | - | - | - | 20 | 27 | 0 | 36 | 20 | 45 | | | | | | |
| 3 | 26 | 62 | 4 | 5 | 0 | 3 | 1 | 6 | 1 | 7 | 20 | 21 | 34 | 27 | 54 | 34 | | | | | | |
| 4 | 2 | 62 | 4 | 11 | - | - | - | - | - | - | 33 | 28 | 54 | 36 | 87 | 46 | | | | | | |
| 4 | 9 | 62 | 4 | 20 | - | - | - | - | - | - | 26 | 27 | 76 | 34 | 102 | 43 | | | | | | |
| 4 | 16 | 62 | 4 | 27 | - | - | - | - | - | - | 5 | 22 | 31 | 30 | 36 | 37 | | | | | | |
| 4 | 23 | 62 | 5 | 23 | 0 | 2 | 2 | 6 | 2 | 6 | 52 | 37 | 252 | 49 | 304 | 61 | | | | | | |
| 4 | 30 | 62 | 5 | 31 | - | - | - | - | - | - | 156 | 42 | 72 | 30 | 228 | 51 | | | | | | |
| 5 | 7 | 62 | 6 | 5 | - | - | - | - | - | - | 37 | 34 | 44 | 43 | 81 | 55 | | | | | | |
| 5 | 14 | 62 | 6 | 21 | - | - | - | - | - | - | 7 | 36 | 67 | 44 | 74 | 57 | | | | | | |
| 5 | 21 | 62 | 6 | 25 | - | - | - | - | - | - | 39 | 18 | 46 | 21 | 85 | 28 | | | | | | |
| 5 | 28 | 62 | 6 | 28 | 3 | 3 | 5 | 6 | 8 | 7 | 24 | 29 | 77 | 38 | 101 | 48 | | | | | | |
| 6 | 4 | 62 | 7 | 3 | - | - | - | - | - | - | 680 | 72 | 60 | 9 | 740 | 73 | | | | | | |
| 6 | 11 | 62 | 7 | 10 | - | - | - | - | - | - | 182 | 38 | 91 | 17 | 273 | 42 | | | | | | |
| 6 | 18 | 62 | 7 | 10 | - | - | - | - | - | - | 171 | 32 | 63 | 30 | 234 | 44 | | | | | | |
| 6 | 25 | 62 | 7 | 20 | 4 | 3 | 6 | 4 | 10 | 5 | 77 | 26 | 78 | 28 | 155 | 38 | | | | | | |
| 7 | 2 | 62 | 8 | 1 | - | - | - | - | - | - | 45 | 57 | 68 | 41 | 113 | 55 | | | | | | |
| 7 | 30 | 62 | 9 | 19 | 2 | 11 | 0 | 2 | 2 | 11 | 94 | 77 | 42 | 16 | 136 | 79 | | | | | | |

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** ARK. RIVER, KANS-COLO LINE TO TULSA

**STATION LOCATION** ARKANSAS RIVER NEAR

PONCA CITY, OKLAHOMA 1

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 6 | 62 | 8 | 28 | - | - | - | - | - | - | 121 | 22 | 41 | 14 | 162 | 26 | | | | | | |
| 8 | 13 | 62 | 8 | 24 | - | - | - | - | - | - | 45 | 80 | 36 | 18 | 81 | 82 | | | | | | |
| 8 | 20 | 62 | 9 | 5 | - | - | - | - | - | - | 10 | 12 | 30 | 15 | 40 | 19 | | | | | | |
| 8 | 27 | 62 | 9 | 11 | 19 | 21 | 1 | 4 | 20 | 21 | 284 | 105 | 42 | 20 | 326 | 123 | | | | | | |
| 9 | 4 | 62 | 9 | 21 | 6 | 6 | 1 | 2 | 7 | 6 | 38 | 65 | 12 | 27 | 50 | 70 | | | | | | |
| 9 | 10 | 62 | 10 | 9 | - | - | - | - | - | - | 128 | 120 | 49 | 16 | 177 | 121 | | | | | | |
| 9 | 17 | 62 | 10 | 25 | - | - | - | - | - | - | 155 | 396 | 0 | 16 | 155 | 396 | | | | | | |
| 9 | 24 | 62 | 10 | 16 | 21 | 24 | 1 | 1 | 22 | 24 | 280 | 154 | 21 | 7 | 301 | 154 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

## PLANKTON POPULATION

**STATE** OKLAHOMA
**MAJOR BASIN** SOUTHWEST—LOWER MISSISSIPPI RIVE
**MINOR BASIN** ARK. RIVER, KANS-COLO LINE TO TU
**STATION LOCATION** ARKANSAS RIVER NEAR
PONCA CITY, OKLAHOMA

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 28900 | 0 | 40 | 850 | 0 | 990 | 0 | 25360 | 1640 | 1040 | 250 | 69 | 7 | 68 | 6 | 51 | 3 | 88 | 2 | 71 | 2 | 38 | 2 | 92 | 1 | 94 | 1 | 87 | 1 |
| 10 | 16 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 120 | 0 | 60 | | | | | | | | | | | | | | | | | | |
| 10 | 31 | 61 | 28800 | 0 | 0 | 480 | 0 | 1720 | 0 | 16150 | 10450 | 440 | 1530 | 69 | 7 | 68 | 5 | 88 | 5 | 71 | 5 | 74 | 5 | 51 | 4 | 91 | 3 | 92 | 2 | 89 | 2 |
| 11 | 20 | 61 | 300 | 0 | 0 | 20 | 0 | 40 | 0 | 20 | 180 | 40 | 180 | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 2100 | 0 | 20 | 160 | 0 | 380 | 0 | 430 | 1130 | 160 | 410 | 68 | 2 | 88 | 2 | 51 | 1 | 91 | 1 | | | | | | | | | | |
| 12 | 18 | 61 | 800 | 0 | 0 | 0 | 0 | 170 | 0 | 20 | 660 | 0 | 40 | 92 | 1 | 88 | 1 | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 1200 | 0 | 0 | 40 | 0 | 290 | 0 | 650 | 220 | 220 | 340 | 68 | 2 | 51 | 1 | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 1300 | 0 | 0 | 20 | 0 | 460 | 0 | 580 | 210 | 20 | 80 | 71 | 2 | 51 | 2 | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 700 | 0 | 0 | 0 | 0 | 70 | 0 | 20 | 650 | 90 | 920 | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 3400 | 0 | 0 | 40 | 0 | 810 | 40 | 270 | 2220 | 40 | 330 | 92 | 4 | 51 | 2 | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 1800 | 0 | 0 | 70 | 0 | 780 | 310 | 220 | 380 | 200 | 690 | 51 | 3 | 63 | 2 | 91 | 1 | | | | | | | | | | | | |
| 3 | 19 | 62 | 23700 | 460 | 290 | 460 | 0 | 13450 | 120 | 5220 | 3750 | 790 | 500 | 51 | 6 | 71 | 5 | 57 | 5 | 92 | 3 | 88 | 3 | 91 | 3 | 69 | 2 | 52 | 2 | 3 | 2 |
| 4 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 285900 | 27820 | 20 | 27200 | 210 | 16770 | 750 | 144070 | 69060 | 36550 | 7410 | 71 | 9 | 68 | 9 | 74 | 8 | 25 | 8 | 88 | 7 | 4 | 7 | 87 | 7 | 3 | 7 | 78 | 7 |
| 5 | 7 | 62 | 323500 | 9770 | 80 | 65910 | * | 2980 | 80 | 64130 | 164230 | 23810 | 17840 | 88 | 9 | 71 | 8 | 25 | 8 | 68 | 8 | 38 | 7 | 3 | 7 | 30 | 5 | 35 | 4 | 51 | 4 |
| 5 | 21 | 62 | 192900 | 2030 | 750 | 51050 | 80 | 790 | 0 | 82970 | 55230 | 13170 | 1950 | 68 | 9 | 88 | 8 | 78 | 7 | 25 | 7 | 38 | 7 | 24 | 7 | 3 | 4 | 91 | 4 | 87 | 4 |
| 6 | 4 | 62 | 2500 | 0 | 0 | 150 | 0 | 230 | 120 | 1100 | 910 | 100 | 40 | 68 | 2 | 71 | 2 | 92 | 1 | 88 | 1 | 78 | 1 | | | | | | | | |
| 6 | 18 | 62 | 42300 | 410 | 80 | 4880 | * | 1530 | 80 | 21030 | 8940 | 5300 | 1330 | 68 | 7 | 50 | 6 | 88 | 4 | 38 | 4 | 91 | 4 | 24 | 4 | 78 | 3 | 25 | 3 | 69 | 3 |
| 7 | 2 | 62 | 105600 | 700 | 0 | 7330 | * | 1240 | 170 | 76420 | 17510 | 13080 | 1860 | 68 | 9 | 69 | 7 | 88 | 5 | 38 | 5 | 78 | 5 | 50 | 4 | 25 | 4 | 91 | 4 | 92 | 4 |
| 7 | 16 | 62 | 46800 | 40 | 0 | 950 | 120 | 540 | 40 | 32620 | 12460 | 10430 | 2360 | 68 | 8 | 69 | 6 | 88 | 6 | 78 | 4 | 92 | 4 | 91 | 3 | 38 | 3 | 66 | 3 | 87 | 3 |
| 8 | 6 | 62 | 3300 | 0 | 0 | 370 | 0 | 790 | 40 | 700 | 1410 | 120 | 210 | 68 | 3 | 51 | 2 | 88 | 2 | 38 | 1 | 52 | 1 | 97 | 1 | | | | | | |
| 8 | 20 | 62 | 98500 | 1240 | 1040 | 48190 | 0 | 1280 | 0 | 30640 | 16150 | 8690 | 1660 | 71 | 9 | 68 | 9 | 24 | 8 | 25 | 6 | 38 | 5 | 88 | 4 | 12 | 3 | 87 | 3 | 88 | 3 |
| 9 | 4 | 62 | 3000 | 0 | 0 | 1350 | 0 | 320 | 0 | 610 | 740 | 1100 | 540 | 38 | 3 | 68 | 2 | 88 | 2 | 24 | 1 | 52 | 1 | 26 | 1 | | | | | | |
| 9 | 17 | 62 | 100 | 0 | 0 | 10 | 0 | 0 | 0 | 30 | 40 | 80 | 230 | | | | | | | | | | | | | | | | | | |
| *5 | 7 | 62 | | | | | 16350 | | | | | | | | | | | | | | | | | | | | | | | | |
| *6 | 18 | 62 | | | | | 5340 | | | | | | | | | | | | | | | | | | | | | | | | |
| *7 | 2 | 62 | | | | | 2240 | | | | | | | | | | | | | | | | | | | | | | | | |

STATION LOCATION ARKANSAS RIVER NEAR

PONCA CITY, OKLAHOMA

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA *(Identifiable) Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 26 | 27 | 73 | 8 | 58 | 6 | 68 | 6 | 53 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 55 | 18 | 5 | 12 | 26 | 9 | 56 | 7 | 54 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 31 | 61 | 4 | 17 | 5 | 12 | 71 | 11 | 72 | 5 | 55 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 85 | 14 | 73 | 12 | 65 | 7 | 68 | 6 | 61 | 160 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 92 | 23 | 71 | 8 | 73 | 6 | 87 | 4 | 59 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 92 | 22 | 71 | 9 | 85 | 8 | 73 | 8 | 53 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 86 | 18 | 92 | 10 | 4 | 6 | 95 | 6 | 60 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 92 | 80 | 36 | 5 | 33 | 3 | 71 | 3 | 9 | 60 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 85 | 27 | 92 | 17 | 71 | 9 | 12 | 6 | 41 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 92 | 30 | 71 | 11 | 85 | 11 | 86 | 7 | 41 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 92 | 32 | 71 | 10 | 85 | 9 | 82 | 9 | 40 | 0 | 0 | 9 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 82 | 53 | 26 | 30 | 4 | 5 | 12 | 2 | 10 | 0 | 0 | 5 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 67 | 54 | 82 | 26 | 26 | 8 | 23 | 8 | 4 | 990 | 0 | 722 | 2 | 8 | 15 | 1 | | | | | | | 22 | 76 | 3 | 50 | 2 | | | 0 | 0 |
| 5 | 21 | 62 | 26 | 71 | 30 | 15 | 12 | 3 | 23 | 2 | 9 | 620 | 0 | 394 | 11 | 7 | | | | | | | | | 1 | | | | | | | - | - |
| 6 | 4 | 62 | 92 | 26 | 12 | 17 | 71 | 13 | 72 | 6 | 38 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 6 | 18 | 62 | 26 | 58 | 12 | 12 | 58 | 5 | 87 | 4 | 21 | 80 | 0 | 30 | 2 | 3 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 26 | 61 | 12 | 5 | 71 | 4 | 30 | 4 | 26 | 0 | 0 | 86 | 22 | 4 | 2 | 3 | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 26 | 47 | 58 | 10 | 12 | 5 | 92 | 5 | 33 | 80 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 6 | 62 | 26 | 22 | 73 | 16 | 92 | 7 | 87 | 5 | 50 | 60 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 20 | 62 | 84 | 46 | 26 | 30 | 58 | 5 | 71 | 2 | 17 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 26 | 55 | 23 | 10 | 82 | 5 | 58 | 3 | 27 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 26 | 27 | 64 | 7 | 71 | 5 | 82 | 5 | 56 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** ARK. RIVER, KANS-COLO LINE TO TULSA

**STATION LOCATION** ARKANSAS RIVER NEAR

PONCA CITY, OKLAHOMA 1

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 15.5 | - | 8.2 | - | - | - | - | - | 282 | 194 | 300 | 20 | 220 | 88 | .8 | 698 | - |
| 10 | 9 | 61 | 20.0 | - | 8.1 | - | - | - | - | - | 393 | 170 | 284 | 20 | 110 | 100 | .7 | 710 | - |
| 10 | 16 | 61 | 18.0 | - | 8.0 | - | - | - | - | - | 119 | 130 | 162 | 20 | 300 | - | - | - | - |
| 10 | 23 | 61 | 16.0 | - | 8.4 | - | - | - | - | - | 393 | 250 | 359 | 20 | 60 | 97 | .6 | 788 | - |
| 10 | 30 | 61 | 18.0 | - | 8.4 | - | - | - | - | - | 444 | 240 | 359 | 5 | 37 | 129 | .5 | 880 | - |
| 11 | 6 | 61 | 8.0 | - | 8.1 | - | - | - | - | - | 68 | 110 | 137 | 10 | 600 | 30 | .5 | 249 | - |
| 11 | 13 | 61 | 10.0 | - | 8.3 | - | - | - | - | - | 342 | 244 | 342 | 10 | 100 | 102 | .5 | 725 | - |
| 11 | 20 | 61 | 9.0 | - | 7.9 | - | - | - | - | - | 103 | 140 | 157 | 10 | 600 | 20 | .3 | 382 | - |
| 11 | 27 | 61 | 8.0 | - | 7.9 | - | - | - | - | - | 308 | 230 | 308 | 30 | 145 | 62 | .0 | 732 | - |
| 12 | 4 | 61 | 12.5 | - | 8.3 | - | - | - | - | - | 397 | 240 | 376 | 20 | 100 | 119 | .4 | 830 | - |
| 12 | 11 | 61 | 2.0 | - | 7.9 | - | - | - | - | - | 376 | 230 | 376 | 5 | 90 | 100 | .3 | 811 | - |
| 12 | 18 | 61 | .4 | - | 8.3 | - | - | - | - | - | 324 | 234 | 342 | 10 | 120 | - | - | - | - |
| 12 | 26 | 61 | .2 | - | 7.9 | - | - | - | - | - | 384 | 230 | 324 | 10 | 90 | - | - | - | - |
| 1 | 2 | 62 | .2 | - | 7.9 | - | - | - | - | - | 410 | 260 | 367 | 10 | 70 | 150 | .3 | 989 | - |
| 1 | 8 | 62 | .1 | - | 8.4 | - | - | - | - | - | 419 | 240 | 342 | 5 | 130 | 145 | .5 | 877 | - |
| 1 | 15 | 62 | - | - | 7.9 | - | - | - | - | - | 316 | 154 | 492 | 20 | 250 | 225 | .7 | 1127 | - |
| 1 | 22 | 62 | .0 | - | 7.9 | - | - | - | - | - | 513 | 270 | 436 | 5 | 25 | - | - | - | - |
| 1 | 29 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 88 | - | 514 | - |
| 2 | 5 | 62 | .4 | - | 7.9 | - | - | - | - | - | 171 | 128 | 171 | 20 | 230 | - | - | - | - |
| 2 | 12 | 62 | .8 | - | 8.1 | - | - | - | - | - | 359 | 220 | 337 | 5 | 175 | - | - | - | - |
| 2 | 19 | 62 | .6 | - | 7.9 | - | - | - | - | - | 325 | 204 | 320 | 10 | 175 | - | - | - | - |
| 2 | 26 | 62 | .1 | - | 8.3 | - | - | - | - | - | 427 | 230 | 215 | 5 | 90 | - | - | - | - |
| 3 | 5 | 62 | .1 | - | 8.1 | - | - | - | - | - | 280 | 250 | 402 | 5 | 95 | 195 | - | 1013 | - |
| 3 | 12 | 62 | .4 | - | 8.3 | - | - | - | - | - | - | 244 | 402 | 10 | 90 | 195 | .7 | 1016 | - |
| 3 | 19 | 62 | 1.3 | - | 8.3 | - | - | - | - | - | 195 | 232 | 406 | 10 | 32 | 225 | .4 | 1061 | - |
| 3 | 26 | 62 | 1.1 | - | 8.3 | - | - | - | - | - | - | 220 | 393 | 5 | 25 | 200 | .4 | 1008 | - |
| 4 | 3 | 62 | 1.8 | - | 8.4 | - | - | - | - | - | 260 | 208 | 384 | 10 | 50 | 210 | .9 | 1061 | - |
| 4 | 9 | 62 | 11.0 | - | 8.3 | - | - | - | - | - | 292 | 170 | 376 | 5 | 60 | 250 | .4 | 1039 | - |
| 4 | 16 | 62 | 11.0 | - | 8.3 | - | - | - | - | - | - | 140 | 320 | 5 | 73 | - | - | - | - |
| 4 | 23 | 62 | 15.0 | - | 8.3 | - | - | - | - | - | - | 160 | 342 | 10 | 40 | - | - | - | - |
| 4 | 30 | 62 | 18.0 | - | 8.3 | - | - | - | - | - | 270 | 140 | 324 | 20 | 170 | 350 | .7 | 978 | - |
| 5 | 1 | 62 | - | - | - | - | - | - | - | - | 335 | - | - | - | - | 200 | .7 | 1071 | - |
| 5 | 7 | 62 | 23.5 | - | 8.3 | - | - | - | - | - | - | 126 | 333 | 20 | 38 | - | - | - | - |
| 5 | 14 | 62 | 20.5 | - | 8.4 | - | - | - | - | - | 340 | 168 | 385 | 20 | 77 | 185 | .9 | 1110 | - |
| 5 | 21 | 62 | 23.0 | .0 | 8.3 | - | - | - | - | - | 384 | 180 | 385 | 20 | 80 | 205 | .6 | 1244 | - |
| 5 | 28 | 62 | 24.0 | - | 8.3 | - | - | - | - | - | 350 | 144 | 342 | 20 | 90 | 185 | .6 | 1151 | - |
| 6 | 4 | 62 | 20.0 | - | 7.7 | - | - | - | - | - | 45 | 74 | 115 | 10 | 1500 | 40 | .2 | - | - |
| 6 | 11 | 62 | 24.0 | - | 8.3 | - | - | - | - | - | 104 | 122 | 171 | 20 | 250 | 65 | .3 | 426 | - |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** OKLAHOMA

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** ARK. RIVER, KANS-COLO LINE TO TULSA

**STATION LOCATION**ARKANSAS RIVER NEAR
PONCA CITY, OKLAHOMA 1

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 18 | 62 | 28.0 | - | 8.3 | - | - | - | - | - | 213 | 166 | 280 | 20 | 450 | 125 | .0 | 704 | - |
| 6 | 25 | 62 | 26.0 | - | 8.4 | - | - | - | - | - | 235 | 136 | 298 | 15 | 190 | 140 | .8 | 797 | - |
| 7 | 2 | 62 | 26.0 | - | 8.4 | - | - | - | - | - | 228 | 120 | 290 | 10 | 165 | 150 | .0 | 782 | - |
| 7 | 9 | 62 | 32.0 | - | 7.5 | - | - | - | - | - | 186 | 148 | 325 | 10 | 300 | 100 | .1 | 734 | - |
| 7 | 16 | 62 | 30.0 | - | 7.4 | - | - | - | - | - | - | 190 | 307 | 30 | 800 | - | - | - | - |
| 7 | 23 | 62 | 28.0 | - | 8.1 | - | - | - | - | - | - | 110 | 152 | 30 | 350 | - | - | - | - |
| 7 | 30 | 62 | 25.0 | - | 7.7 | - | - | - | - | - | 85 | 100 | 153 | 30 | 800 | 50 | .4 | 357 | - |
| 8 | 6 | 62 | 28.0 | - | 8.1 | - | - | - | - | - | 138 | 134 | 240 | 20 | 1000 | 100 | .8 | 553 | - |
| 8 | 13 | 62 | 26.5 | - | 7.9 | - | - | - | - | - | 130 | 134 | 168 | 10 | 800 | 85 | .7 | 520 | - |
| 8 | 20 | 62 | 25.0 | - | 8.4 | - | - | - | - | - | 232 | 160 | 311 | 10 | 160 | 145 | 1.0 | 827 | - |
| 8 | 27 | 62 | 23.5 | - | 8.3 | - | - | - | - | - | 120 | 130 | 202 | 10 | - | 90 | .0 | 504 | - |
| 9 | 3 | 62 | 25.0 | - | 8.2 | - | - | - | - | - | - | 136 | 205 | 20 | 800 | - | - | - | - |
| 9 | 4 | 62 | 25.0 | - | 8.2 | - | - | - | - | - | 205 | 160 | 260 | 10 | 173 | 120 | 1.0 | 700 | - |
| 9 | 10 | 62 | 17.0 | - | 8.1 | - | - | - | - | - | 145 | 124 | 196 | 10 | 310 | 75 | .7 | 513 | - |
| 9 | 17 | 62 | 24.0 | - | 8.0 | - | - | - | - | - | 75 | 94 | 145 | 20 | 2000 | 18 | .2 | 323 | - |
| 9 | 24 | 62 | 18.5 | - | 7.9 | - | - | - | - | - | 20 | - | - | - | - | 4 | .4 | 218 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Ralston, Oklahoma
Operated by U.S. Geological Survey

STATE Oklahoma

MAJOR BASIN Southwest-Lower Mississippi River

MINOR BASIN Ark. River, Kans-Colo Line to Tulsa

STATION LOCATION Arkansas River near

Ponca City, Oklahoma

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.460 | 4.720 | 6.190 | 4.200 | 22.100 | 3.000 | 3.000 | 3.520 | 12.700 | 3.400 | 4.630 | 2.120 |
| 2 | 5.650 | 28.500 | 5.920 | 4.100 | 20.200 | 2.800 | 2.900 | 3.400 | 11.800 | 2.900 | 6.420 | 2.030 |
| 3 | 5.780 | 74.700 | 5.650 | 4.100 | 17.300 | 2.900 | 2.710 | 3.100 | 9.200 | 2.620 | 7.000 | 2.150 |
| 4 | 5.280 | 94.500 | 5.520 | 4.000 | 14.200 | 3.500 | 2.800 | 2.710 | 22.000 | 2.360 | 6.320 | 1.910 |
| 5 | 4.520 | 57.800 | 5.400 | 4.000 | 11.000 | 3.700 | 2.800 | 2.620 | 29.300 | 2.280 | 5.780 | 1.970 |
| 6 | 4.100 | 32.300 | 5.150 | 4.200 | 9.200 | 3.700 | 2.800 | 2.540 | 26.000 | 2.120 | 5.150 | 3.300 |
| 7 | 3.700 | 19.500 | 5.020 | 4.200 | 7.750 | 3.600 | 2.800 | 2.360 | 21.100 | 2.260 | 5.280 | 3.900 |
| 8 | 3.400 | 13.800 | 4.900 | 4.200 | 6.860 | 3.700 | 2.710 | 2.280 | 16.400 | 11.300 | 5.650 | 4.100 |
| 9 | 3.200 | 11.400 | 6.320 | 4.000 | 6.190 | 3.500 | 2.710 | 2.200 | 16.000 | 9.760 | 5.920 | 4.100 |
| 10 | 8.500 | 9.550 | 7.900 | 3.400 | 5.780 | 3.400 | 2.710 | 2.120 | 15.500 | 10.600 | 6.190 | 3.600 |
| 11 | 57.600 | 8.680 | 8.350 | 1.800 | 5.400 | 3.300 | 2.710 | 2.020 | 12.600 | 8.770 | 5.400 | 3.600 |
| 12 | 63.800 | 8.050 | 7.150 | 1.800 | 5.280 | 3.300 | 2.710 | 1.920 | 9.900 | 8.350 | 4.520 | 3.700 |
| 13 | 45.500 | 7.750 | 6.060 | 2.800 | 5.020 | 3.300 | 2.620 | 1.800 | 8.680 | 9.900 | 4.100 | 3.700 |
| 14 | 38.900 | 7.600 | 5.020 | 3.400 | 4.900 | 3.400 | 2.620 | 1.720 | 7.300 | 7.150 | 3.600 | 3.200 |
| 15 | 25.800 | 10.500 | 4.400 | 3.400 | 4.900 | 3.500 | 2.540 | 1.660 | 6.460 | 5.520 | 3.400 | 2.800 |
| 16 | 16.400 | 18.500 | 4.650 | 3.400 | 5.020 | 3.300 | 2.450 | 1.600 | 6.190 | 5.400 | 3.000 | 2.540 |
| 17 | 11.800 | 22.900 | 6.190 | 3.400 | 5.150 | 3.200 | 2.450 | 1.520 | 5.650 | 12.000 | 2.710 | 4.220 |
| 18 | 8.200 | 27.300 | 9.200 | 3.400 | 6.600 | 3.100 | 2.360 | 1.480 | 5.020 | 10.600 | 2.540 | 12.500 |
| 19 | 6.730 | 23.400 | 9.900 | 3.400 | 6.600 | 3.000 | 2.360 | 1.420 | 4.520 | 9.550 | 2.400 | 8.900 |
| 20 | 5.780 | 16.700 | 10.600 | 2.800 | 5.650 | 3.000 | 2.280 | 1.380 | 4.100 | 7.900 | 2.200 | 6.060 |
| 21 | 5.150 | 13.400 | 8.850 | 1.800 | 5.150 | 3.000 | 2.280 | 1.350 | 3.800 | 6.860 | 2.070 | 4.100 |
| 22 | 4.650 | 11.800 | 6.730 | 1.800 | 4.780 | 2.900 | 2.360 | 1.260 | 3.600 | 5.920 | 1.950 | 5.860 |
| 23 | 4.200 | 10.200 | 5.920 | 1.800 | 4.520 | 2.900 | 2.280 | 1.260 | 3.600 | 4.900 | 1.820 | 6.750 |
| 24 | 4.000 | 9.550 | 5.650 | 2.200 | 4.300 | 3.300 | 2.200 | 1.280 | 3.300 | 5.020 | 1.780 | 16.400 |
| 25 | 3.700 | 8.500 | 5.280 | 2.800 | 4.200 | 3.900 | 2.200 | 1.240 | 3.500 | 6.650 | 1.750 | 15.500 |
| 26 | 3.500 | 7.900 | 5.280 | 3.800 | 4.100 | 4.000 | 2.360 | 1.260 | 4.200 | 9.900 | 1.840 | 9.420 |
| 27 | 3.300 | 7.300 | 4.900 | 5.500 | 3.800 | 3.500 | 2.280 | 1.260 | 3.600 | 7.120 | 1.920 | 8.050 |
| 28 | 3.100 | 6.860 | 4.900 | 8.500 | 3.400 | 3.300 | 2.360 | 1.270 | 3.600 | 5.780 | 2.860 | 7.450 |
| 29 | 3.000 | 6.460 | 4.780 | 12.000 |  | 4.100 | 2.560 | 1.430 | 3.800 | 5.150 | 2.620 | 6.320 |
| 30 | 3.000 | 6.320 | 4.780 | 21.000 |  | 3.500 | 2.920 | 2.870 | 3.800 | 4.900 | 2.120 | 5.650 |
| 31 | 3.400 |  | 4.520 | 24.000 |  | 3.200 |  | 2.600 |  | 4.600 | 2.030 |  |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 4 | 24 | 62 | 5 | 4 | 3510 | 183 | 75 | 108 | 4 | 17 | 23 | 5 | 2 | 16 | 0 | 8 | 6 | 2 | 15 |
| 5 | 4 | 62 | 5 | 13 | 1862 | 485 | 69 | 416 | 3 | 19 | 20 | 5 | 2 | 13 | 0 | 6 | 5 | 1 | 15 |
| 6 | 4 | 62 | 7 | 2 | 3600 | 176 | 38 | 138 | 1 | 9 | 14 | 3 | 2 | 7 | 2 | 4 | 2 | 1 | 7 |
| 7 | 2 | 62 | 8 | 1 | 1363 | 296 | 57 | 239 | 1 | 17 | 17 | 3 | 2 | 11 | 1 | 6 | 3 | 1 | 12 |
| 8 | 1 | 62 | 9 | 10 | 4858 | 153 | 24 | 129 | 1 | 6 | 8 | 1 | 1 | 6 | 0 | 3 | 1 | 1 | 4 |
| 9 | 10 | 62 | 10 | 14 | 3996 | 284 | 43 | 241 | 1 | 14 | 7 | 1 | 1 | 4 | 1 | 4 | 4 | 0 | 13 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** KANSAS

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** ARK. RIVER, KANS-COLO LINE TO TULSA

**STATION LOCATION** ARKANSAS RIVER AT

COOLIDGE, KANSAS 2

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 11 | 6 | 8 | 46 | 24 | 52 | 25 | 66 | 49 | 90 | 63 | 156 | 80 | | | | | | |
| 10 | 9 | 61 | 10 | 19 | - | - | - | - | - | - | 73 | 36 | 23 | 37 | 96 | 52 | | | | | | |
| 10 | 13 | 61 | 10 | 24 | - | - | - | - | - | - | 154 | 62 | 80 | 76 | 234 | 98 | | | | | | |
| 10 | 23 | 61 | 11 | 1 | - | - | - | - | - | - | 70 | 69 | 94 | 84 | 164 | 109 | | | | | | |
| 10 | 30 | 61 | 11 | 6 | - | - | - | - | - | - | 93 | 61 | 109 | 77 | 202 | 98 | | | | | | |
| 11 | 6 | 61 | 11 | 15 | 5 | 4 | 76 | 27 | 81 | 27 | 30 | 31 | 78 | 52 | 108 | 61 | | | | | | |
| 11 | 14 | 61 | 11 | 27 | - | - | - | - | - | - | 45 | 47 | 102 | 85 | 147 | 97 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | - | - | - | - | - | - | 10 | 8 | 55 | 19 | 65 | 21 | | | | | | |
| 12 | 26 | 61 | 1 | 3 | 4 | 6 | 42 | 23 | 46 | 24 | 20 | 43 | 89 | 61 | 109 | 75 | | | | | | |
| 1 | 2 | 62 | 1 | 10 | 4 | 8 | 63 | 35 | 67 | 36 | 33 | 42 | 91 | 64 | 124 | 77 | | | | | | |
| 1 | 8 | 62 | 1 | 17 | - | - | - | - | - | - | 239 | 47 | 362 | 71 | 601 | 85 | | | | | | |
| 1 | 15 | 62 | 1 | 22 | - | - | - | - | - | - | 4 | 53 | 70 | 104 | 74 | 117 | | | | | | |
| 1 | 23 | 62 | 1 | 31 | - | - | - | - | - | - | 11 | 52 | 94 | 85 | 105 | 100 | | | | | | |
| 1 | 29 | 62 | 2 | 8 | - | - | - | - | - | - | 48 | 56 | 17 | 90 | 65 | 106 | | | | | | |
| 2 | 5 | 62 | 2 | 13 | 0 | 5 | 45 | 26 | 45 | 26 | 4 | 42 | 76 | 62 | 80 | 75 | | | | | | |
| 2 | 12 | 62 | 2 | 20 | - | - | - | - | - | - | 49 | 39 | 276 | 65 | 325 | 76 | | | | | | |
| 2 | 19 | 62 | 3 | 26 | - | - | - | - | - | - | 0 | 46 | 33 | 94 | 33 | 105 | | | | | | |
| 2 | 26 | 62 | 3 | 21 | - | - | - | - | - | - | 0 | 56 | 95 | 96 | 95 | 111 | | | | | | |
| 3 | 5 | 62 | 3 | 16 | 6 | 6 | 91 | 35 | 97 | 36 | 0 | 40 | 96 | 65 | 96 | 76 | | | | | | |
| 3 | 12 | 62 | 3 | 23 | - | - | - | - | - | - | 22 | 41 | 121 | 71 | 143 | 82 | | | | | | |
| 3 | 19 | 62 | 3 | 30 | - | - | - | - | - | - | 20 | 59 | 29 | 96 | 49 | 113 | | | | | | |
| 3 | 26 | 62 | 4 | 4 | - | - | - | - | - | - | 67 | 55 | 72 | 86 | 139 | 91 | | | | | | |
| 4 | 2 | 62 | 4 | 11 | 2 | 22 | 15 | 5 | 17 | 23 | 33 | 37 | 26 | 61 | 59 | 71 | | | | | | |
| 4 | 9 | 62 | 4 | 20 | - | - | - | - | - | - | 24 | 54 | 85 | 85 | 109 | 101 | | | | | | |
| 4 | 16 | 62 | 4 | 27 | - | - | - | - | - | - | 0 | 78 | 76 | 82 | 76 | 113 | | | | | | |
| 4 | 23 | 62 | 5 | 22 | - | - | - | - | - | - | 83 | 44 | 63 | 60 | 146 | 74 | | | | | | |
| 4 | 30 | 62 | 5 | 31 | - | - | - | - | - | - | 48 | 77 | 198 | 107 | 246 | 132 | | | | | | |
| 5 | 4 | 62 | 5 | 31 | - | - | - | - | - | - | 49 | 46 | 104 | 65 | 153 | 80 | | | | | | |
| 5 | 14 | 62 | 6 | 21 | 5 | 6 | 37 | 23 | 42 | - | 126 | 75 | 118 | 100 | 244 | 125 | | | | | | |
| 5 | 18 | 62 | 6 | 25 | - | - | - | - | - | - | 217 | 27 | 144 | 23 | 361 | 35 | | | | | | |
| 5 | 28 | 62 | 7 | 2 | - | - | - | - | - | - | 96 | 60 | 131 | 81 | 227 | 103 | | | | | | |
| 6 | 1 | 62 | 7 | 2 | - | - | - | - | - | - | 149 | 61 | 179 | 84 | 328 | 104 | | | | | | |
| 6 | 11 | 62 | 7 | 11 | 42 | 23 | 14 | 14 | 56 | 27 | 253 | 83 | 60 | 72 | 313 | 110 | | | | | | |
| 6 | 18 | 62 | 7 | 18 | - | - | - | - | - | - | 464 | 68 | 169 | 76 | 633 | 102 | | | | | | |
| 6 | 25 | 62 | 7 | 19 | - | - | - | - | - | - | 817 | 104 | 94 | 42 | 911 | 112 | | | | | | |
| 7 | 2 | 62 | 8 | 1 | 3 | 2 | 40 | 20 | 43 | 20 | 22 | 10 | 97 | 95 | 119 | 96 | | | | | | |
| 8 | 1 | 62 | 8 | 17 | - | - | - | - | - | - | 257 | 53 | 79 | 17 | 336 | 56 | | | | | | |
| 8 | 6 | 62 | 8 | 17 | 6 | 6 | 17 | 19 | 23 | 20 | 71 | 56 | 94 | 81 | 165 | 98 | | | | | | |
| 8 | 13 | 62 | 10 | 13 | - | - | - | - | - | - | 50 | 57 | 90 | 79 | 140 | 97 | | | | | | |
| 8 | 21 | 62 | 9 | 19 | - | - | - | - | - | - | 41 | 57 | 189 | 105 | 230 | 119 | | | | | | |
| 8 | 27 | 62 | 10 | 11 | - | - | - | - | - | - | 0 | 64 | 25 | 99 | 25 | 118 | | | | | | |

STATION LOCATION ARKANSAS RIVER AT

COOLIDGE, KANSAS

| DATE SAMPLE TAKEN | | | DATE OF DETERMINATION | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ALPHA | | | | | | BETA | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 9 | 4 | 62 | 9 | 18 | 0 | 5 | 40 | 28 | 40 | 28 | 60 | 48 | 101 | 83 | 161 | 96 | | | | | | | |
| 9 | 10 | 62 | 10 | 4 | – | – | – | – | – | – | 19 | 60 | 15 | 99 | 34 | 116 | | | | | | | |
| 9 | 17 | 62 | 10 | 9 | – | – | – | – | – | – | 22 | 61 | 25 | 104 | 47 | 121 | | | | | | | |
| 9 | 24 | 62 | 10 | 16 | – | – | – | – | – | – | 71 | 68 | 110 | 101 | 181 | 122 | | | | | | | |

**MINOR BASIN** ARK. RIVER, KANS-COLO LINE TO TULSA

**STATION LOCATION** ARKANSAS RIVER AT

COOLIDGE, KANSAS 2

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 1800 | 0 | 0 | 100 | 0 | 40 | 0 | 120 | 1530 | 20 | 410 | 74 | 2 | 89 | 1 | | | | | | | | | | | | | | | | |
| 10 | 13 | 61 | 3400 | 0 | 0 | 150 | 0 | 20 | 0 | 170 | 3020 | 0 | 20 | 87 | 3 | 88 | 3 | 80 | 1 | 74 | 1 | | | | | | | | | | | | |
| 11 | 6 | 61 | 3500 | 0 | 120 | 60 | 0 | 120 | 0 | 170 | 3060 | 20 | 640 | 74 | 3 | 88 | 3 | 89 | 2 | 91 | 2 | 87 | 1 | | | | | | | | | | |
| 11 | 20 | 61 | 1500 | 0 | 0 | 40 | 20 | 20 | 0 | 60 | 1330 | 0 | 230 | 88 | 1 | 89 | 1 | 91 | 1 | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 1450 | 20 | 230 | 88 | 1 | 74 | 1 | 92 | 1 | 91 | 1 | | | | | | | | | | | | |
| 12 | 18 | 61 | 900 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 830 | 0 | 20 | 88 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 800 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 750 | 0 | 40 | 88 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 100 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 180 | 50 | 90 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 2000 | 0 | 0 | 20 | 0 | 70 | 0 | 50 | 1850 | 20 | 160 | 92 | 2 | 88 | 1 | 91 | 1 | 89 | 1 | | | | | | | | | | | | |
| 2 | 19 | 62 | 4000 | 0 | 0 | 20 | 0 | 790 | 0 | 20 | 3140 | 0 | 750 | 92 | 4 | 57 | 3 | 91 | 1 | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 3300 | 0 | 0 | 0 | 0 | 150 | 0 | 100 | 3080 | 40 | 580 | 92 | 4 | 88 | 2 | 91 | 2 | 87 | 1 | 78 | 1 | | | | | | | | | | |
| 3 | 19 | 62 | 2200 | 0 | 0 | 20 | 0 | 90 | 400 | 0 | 1650 | 0 | 1540 | 92 | 3 | 65 | 2 | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 2200 | 0 | 0 | 0 | 0 | 100 | 0 | 20 | 2070 | 0 | 120 | 92 | 3 | 88 | 1 | 91 | 1 | 74 | 1 | 87 | 1 | 89 | 1 | | | | | | | | |
| 4 | 16 | 62 | 5600 | 0 | 0 | 20 | 0 | 310 | 0 | 120 | 5130 | 20 | 660 | 88 | 3 | 91 | 3 | 87 | 3 | 74 | 3 | 92 | 2 | 78 | 2 | 86 | 1 | | | | | | |
| 5 | 4 | 62 | 4300 | 0 | 20 | 170 | 0 | 210 | 0 | 100 | 3830 | 0 | 520 | 88 | 3 | 92 | 3 | 91 | 2 | 78 | 1 | 86 | 1 | 25 | 1 | | | | | | | | |
| 5 | 18 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 20 | 110 | | | | | | | | | | | | | | | | | | | | |
| 6 | 1 | 62 | 6900 | 0 | 20 | 520 | 40 | 80 | 0 | 250 | 5960 | 80 | 950 | 88 | 4 | 92 | 3 | 87 | 3 | 89 | 3 | 91 | 3 | 74 | 2 | 25 | 1 | 68 | 1 | 78 | 1 | 73 | 1 |
| 6 | 18 | 62 | 4800 | 0 | 0 | 40 | 20 | 270 | 0 | 170 | 4350 | 0 | 560 | 88 | 3 | 87 | 3 | 89 | 2 | 92 | 2 | 86 | 1 | 57 | 1 | 91 | 1 | 74 | 1 | | | | |
| 7 | 2 | 62 | 1900 | 0 | 0 | 60 | 0 | 520 | 40 | 120 | 1160 | 0 | 170 | 57 | 2 | 88 | 1 | 92 | 1 | 74 | 1 | | | | | | | | | | | | |
| 7 | 16 | 62 | 11900 | 0 | 0 | 150 | 170 | 990 | 0 | 1390 | 9160 | 170 | 970 | 89 | 5 | 88 | 4 | 68 | 4 | 51 | 3 | 92 | 3 | 74 | 3 | 87 | 2 | 78 | 1 | 86 | 1 | 98 | 1 |
| 8 | 6 | 62 | 3700 | 0 | 0 | 0 | 130 | 250 | 0 | 1480 | 1790 | 210 | 110 | 68 | 3 | 69 | 2 | 51 | 1 | 92 | 1 | 88 | 1 | 74 | 1 | | | | | | | | |
| 8 | 21 | 62 | 3700 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 3690 | 40 | 250 | 88 | 5 | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 7000 | 0 | 0 | 0 | 0 | 40 | 0 | 80 | 6830 | 0 | 540 | 88 | 6 | 74 | 1 | 89 | 1 | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 4100 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 4050 | 90 | 970 | 88 | 5 | 74 | 2 | 92 | 2 | 87 | 1 | | | | | | | | | | | | |

# PLANKTON POPULATION

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** ARK. RIVER, KANS-COLO LINE [illegible]

**STATION LOCATION** ARKANSAS RIVER AT

COOLIDGE, KANSAS

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | PROTOZOA (Identifiable) Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | | |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS Number per liter |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 5 | 31 | 75 | 19 | 92 | 7 | 87 | 4 | 39 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 10 | 13 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 11 | 6 | 61 | 5 | 15 | 4 | 15 | 75 | 13 | 71 | 7 | 50 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 11 | 20 | 61 | 75 | 13 | 5 | 12 | 87 | 9 | 71 | 7 | 59 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 12 | 4 | 61 | 92 | 14 | 4 | 10 | 71 | 9 | 5 | 9 | 58 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 12 | 18 | 61 | 92 | 15 | 75 | 11 | 71 | 7 | 65 | 6 | 61 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 1 | 2 | 62 | 92 | 13 | 75 | 13 | 5 | 9 | 71 | 9 | 56 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 1 | 15 | 62 | 26 | 12 | 4 | 11 | 92 | 9 | 86 | 9 | 59 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 2 | 5 | 62 | 92 | 26 | 71 | 10 | 75 | 6 | 86 | 6 | 52 | 110 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 2 | 19 | 62 | 92 | 66 | 87 | 5 | 71 | 4 | 75 | 3 | 22 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 3 | 5 | 62 | 92 | 39 | 71 | 8 | 86 | 6 | 12 | 5 | 42 | 60 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 3 | 19 | 62 | 92 | 67 | 75 | 6 | 65 | 5 | 12 | 3 | 19 | 130 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 4 | 2 | 62 | 92 | 38 | 4 | 9 | 75 | 8 | 86 | 6 | 39 | 80 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 4 | 16 | 62 | 71 | 14 | 87 | 12 | 92 | 8 | 72 | 7 | 59 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | | |
| 5 | 4 | 62 | 92 | 21 | 71 | 18 | 86 | 9 | 12 | 5 | 47 | 60 | 0 | 0 | | | | | | | | | | | 5 | 76 | 1 | | | | | | |
| 5 | 18 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 6 | 1 | 62 | 92 | 17 | 71 | 13 | 75 | 13 | 65 | 6 | 51 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | | |
| 6 | 18 | 62 | 71 | 18 | 75 | 13 | 92 | 10 | 53 | 6 | 53 | 0 | 0 | 0 | | | | | | | | | | | 4 | 76 | 1 | | | | | | |
| 7 | 2 | 62 | 92 | 15 | 5 | 14 | 75 | 8 | 71 | 7 | 56 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 7 | 16 | 62 | 75 | 39 | 71 | 15 | 92 | 7 | 5 | 7 | 32 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | | |
| 8 | 6 | 62 | 26 | 15 | 92 | 14 | 65 | 11 | 4 | 8 | 52 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 8 | 21 | 62 | 67 | 98 | 65 | 1 | | | | | 1 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | | |
| 9 | 4 | 62 | 67 | 80 | 71 | 8 | 70 | 4 | 4 | 3 | 5 | 0 | 0 | 93 | 12 | 3 | 16 | 3 | 22 | 2 | 15 | 1 | | | 0 | | | | | | | | |
| 9 | 17 | 62 | 67 | 55 | 92 | 8 | 70 | 7 | 5 | 6 | 24 | 0 | 0 | 38 | 13 | 3 | 16 | 1 | | | | | | | 3 | 52 | 1 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** KANSAS

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** ARK. RIVER, KANS-COLO LINE TO TULSA

**STATION LOCATION** ARKANSAS RIVER AT
COOLIDGE, KANSAS 2

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | - | - | 7.4 | - | - | - | - | - | 118 | 210 | 1300 | 5 | 240 | 1900 | .0 | 3160 | - |
| 10 | 9 | 61 | - | - | 7.4 | - | - | - | - | - | 110 | 196 | 1200 | 5 | 500 | 1750 | .0 | 2897 | - |
| 10 | 23 | 61 | - | - | 8.0 | - | - | - | - | - | 128 | 216 | 1390 | 5 | 650 | 1900 | .1 | 3304 | - |
| 10 | 30 | 61 | - | - | 7.8 | - | - | - | - | - | 112 | 212 | 1330 | - | 270 | 1562 | .0 | 3072 | - |
| 11 | 6 | 61 | - | - | 7.7 | - | - | - | - | - | 130 | 212 | 1420 | 5 | 280 | 2100 | .0 | 3480 | - |
| 11 | 14 | 61 | - | - | - | - | - | - | - | - | 144 | 212 | 1530 | 5 | 0 | 2200 | .0 | 3765 | - |
| 11 | 20 | 61 | - | - | 7.7 | - | - | - | - | - | - | 166 | 1400 | - | - | 2250 | .2 | 3482 | - |
| 11 | 27 | 61 | - | - | 7.9 | - | - | - | - | - | 84 | 194 | 1030 | 15 | - | 1300 | .2 | 2271 | - |
| 12 | 26 | 61 | - | - | - | - | - | - | - | - | - | 143 | 240 | 5 | 110 | 2200 | .0 | 3865 | - |
| 1 | 2 | 62 | - | - | 7.6 | - | - | - | - | - | 140 | 180 | 1550 | 5 | 50 | 2300 | .0 | 3906 | - |
| 1 | 8 | 62 | - | - | 7.6 | - | - | - | - | - | 141 | - | 1968 | 5 | 75 | 2500 | .0 | 3820 | - |
| 1 | 15 | 62 | - | - | - | - | - | - | - | - | 168 | - | 1670 | - | - | 1150 | - | 4162 | - |
| 1 | 22 | 62 | - | - | 7.4 | - | - | - | - | - | 154 | 222 | 1670 | 5 | - | 2375 | .3 | - | - |
| 1 | 29 | 62 | - | - | 7.5 | - | - | - | - | - | 130 | - | 1460 | 5 | 120 | 2050 | .0 | 3556 | - |
| 2 | 5 | 62 | - | - | - | - | - | - | - | - | 138 | 198 | 1570 | - | - | 2300 | .0 | 3962 | - |
| 2 | 12 | 62 | - | - | - | - | - | - | - | - | 138 | 196 | 1566 | - | - | 2300 | .0 | 3923 | - |
| 2 | 26 | 62 | - | - | - | - | - | - | - | - | 155 | 184 | 1720 | 5 | 0 | 2400 | .0 | 4170 | - |
| 3 | 5 | 62 | - | - | - | - | - | - | - | - | 135 | 204 | 1408 | 5 | - | 2250 | .0 | 3798 | - |
| 3 | 12 | 62 | - | - | - | - | - | - | - | - | 156 | 112 | 1660 | 5 | - | 2500 | .0 | 4031 | - |
| 3 | 26 | 62 | - | - | - | - | - | - | - | - | 146 | 198 | 1620 | 5 | *25 | 2500 | .0 | 3987 | - |
| 4 | 9 | 62 | 16.0 | - | 8.2 | - | - | - | - | 0 | 153 | 212 | 1592 | 15 | 0 | 2250 | .0 | 4047 | - |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | 96 | 228 | 1340 | 0 | 275 | 1800 | .0 | 3172 | - |
| 5 | 4 | 62 | - | - | - | - | - | - | - | - | 112 | 212 | 1330 | 0 | 180 | 1900 | .0 | 3260 | - |
| 5 | 14 | 62 | - | - | 7.6 | - | - | - | - | - | 147 | 200 | 1412 | 5 | 25 | 2000 | .0 | 3775 | - |
| 5 | 28 | 62 | - | - | - | - | - | - | - | - | 115 | 204 | 1352 | 5 | 112 | 1950 | .0 | 3441 | - |
| 6 | 1 | 62 | - | - | - | - | - | - | - | - | 125 | 204 | 1480 | - | 58 | 1750 | .0 | 3318 | - |
| 6 | 25 | 62 | - | - | - | - | - | - | - | - | 62 | 180 | 352 | 10 | 5000 | 1050 | .2 | 2120 | - |
| 7 | 2 | 62 | - | - | - | - | 21 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 1 | 62 | - | - | - | - | 11 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 6 | 62 | - | - | - | - | - | - | - | - | 122 | 180 | 1310 | 5 | 25 | 1900 | .0 | 3322 | - |
| 8 | 13 | 62 | - | - | - | - | - | - | - | - | 95 | 172 | 488 | 5 | 28 | 1700 | .0 | 2990 | - |
| 8 | 21 | 62 | - | - | - | - | - | - | - | - | 298 | 184 | 1370 | 0 | 25 | 2000 | .1 | 3500 | - |
| 8 | 27 | 62 | - | - | 8.2 | - | - | - | - | - | 278 | 102 | 1440 | 0 | *25 | 2100 | .0 | 3730 | - |
| 9 | 10 | 62 | - | - | - | - | - | - | - | - | 144 | 164 | 630 | 5 | 25 | 1900 | .0 | 3285 | - |
| 9 | 24 | 62 | - | - | - | - | - | - | - | - | 164 | 184 | 612 | 5 | 5000 | 2200 | .0 | 3990 | - |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Coolidge, Kansas
Operated by U.S. Geological Survey

MAJOR BASIN Southwest-Lower Mississippi River

MINOR BASIN Ark. River, Kans-Colo Line to Tulsa

STATION LOCATION Arkansas River at
Coolidge, Kansas

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .220 | .127 | .155 | .128 | .202 | .100 | .118 | .390 | .288 | .066 | .676 | .0029 |
| 2 | .146 | .180 | .140 | .121 | .180 | .110 | .114 | .378 | .336 | .075 | .408 | .0031 |
| 3 | .137 | .240 | .128 | .121 | .150 | .125 | .118 | .282 | .402 | .128 | .270 | .0036 |
| 4 | .151 | .185 | .140 | .132 | .145 | .150 | .124 | .185 | .440 | .091 | .160 | .0079 |
| 5 | .156 | .151 | .155 | .132 | .150 | .155 | .132 | .132 | .372 | .104 | .118 | .0068 |
| 6 | .166 | .151 | .165 | .135 | .160 | .155 | .132 | .100 | .372 | .294 | .091 | .0052 |
| 7 | .175 | .132 | .175 | .135 | .160 | .155 | .110 | .075 | .578 | .282 | .072 | .0041 |
| 8 | .166 | .118 | .170 | .124 | .165 | .145 | .107 | .056 | .592 | .276 | .121 | .0063 |
| 9 | .175 | .114 | .165 | .070 | .165 | .128 | .097 | .040 | .571 | .132 | .202 | .084 |
| 10 | .513 | .114 | .130 | .065 | .145 | .121 | .091 | .029 | .537 | .100 | .234 | .042 |
| 11 | .255 | .121 | .100 | .080 | .135 | .118 | .270 | .012 | .504 | .118 | .288 | .023 |
| 12 | .286 | .124 | .080 | .100 | .132 | .110 | .426 | .0090 | .426 | .128 | .282 | .019 |
| 13 | .280 | .121 | .080 | .100 | .145 | .124 | .426 | .0090 | .402 | .081 | .107 | .025 |
| 14 | .265 | .118 | .110 | .093 | .140 | .135 | .348 | .025 | .288 | .061 | .072 | .027 |
| 15 | .260 | .150 | .130 | .087 | .155 | .155 | .300 | .027 | .264 | .045 | .064 | .023 |
| 16 | .275 | .180 | .132 | .084 | .150 | .145 | .306 | .042 | .218 | .053 | .056 | .020 |
| 17 | .260 | .170 | .135 | .081 | .145 | .135 | .324 | .107 | .196 | .104 | .047 | .012 |
| 18 | .240 | .175 | .136 | .078 | .150 | .132 | .282 | 2.650 | .218 | .084 | .038 | .0079 |
| 19 | .215 | .180 | .134 | .075 | .140 | .118 | .288 | 1.330 | .175 | .045 | .040 | .0085 |
| 20 | .180 | .165 | .135 | .073 | .140 | .118 | .306 | .498 | .128 | .165 | .031 | .016 |
| 21 | .190 | .160 | .134 | .071 | .165 | .118 | .300 | .324 | .114 | .104 | .0090 | .027 |
| 22 | .175 | .155 | .137 | .068 | .170 | .140 | .288 | .300 | .081 | .072 | .0074 | .027 |
| 23 | .156 | .150 | .150 | .087 | .175 | .145 | .288 | .354 | .081 | .114 | .0052 | .042 |
| 24 | .156 | .140 | .145 | .106 | .170 | .132 | .360 | .348 | .218 | .229 | .0047 | .022 |
| 25 | .132 | .135 | .150 | .125 | .135 | .118 | .342 | .306 | .390 | .128 | .0041 | .016 |
| 26 | .118 | .135 | .165 | .144 | .090 | .114 | .330 | .252 | .196 | .104 | .0041 | .017 |
| 27 | .142 | .132 | .160 | .163 | .060 | .110 | .336 | .252 | .240 | .537 | .0034 | .015 |
| 28 | .156 | .140 | .128 | .183 | .070 | .107 | .348 | .240 | .264 | .870 | .0031 | .017 |
| 29 | .161 | .145 | .124 | .204 | | .104 | .390 | .229 | .160 | .420 | .0027 | .016 |
| 30 | .137 | .165 | .132 | .224 | | .100 | .426 | .185 | .091 | .414 | .0024 | .017 |
| 31 | .137 | | .140 | .202 | | .114 | | .202 | | .396 | .0027 | |

**STATION LOCATION** BEAR RIVER ABOVE
PRESTON, IDAHO

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Cod* | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 9 | 10 | 62 | 1100 | 0 | 0 | 40 | 0 | 0 | 380 | 170 | 510 | 40 | 510 | 63 | 2 | | | | | | | | | | | | | | | | |
| 9 | 24 | 62 | 900 | 10 | 0 | 100 | 0 | 60 | 0 | 650 | 130 | 60 | 350 | 68 | 2 | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | PROTOZOA (Identifiable) Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 9 | 10 | 62 | 16 | 9 | 36 | 9 | 65 | 9 | 56 | 7 | 66 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 24 | 62 | 26 | 40 | 92 | 7 | 80 | 6 | 16 | 6 | 41 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** GREAT BASIN
**MINOR BASIN** GREAT SALT LAKE
**STATION LOCATION** BEAR RIVER ABOVE
PRESTON, IDAHO

125

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 20 | 62 | 9 | 5 | 0 | 1 | 2 | 2 | 2 | 2 | 0 | 34 | 34 | 16 | 34 | 38 | | | | | | |
| 8 | 27 | 62 | 9 | 14 | 0 | 1 | 1 | 3 | 1 | 3 | 6 | 9 | 29 | 15 | 35 | 17 | | | | | | |
| 9 | 4 | 62 | 9 | 21 | 0 | 1 | 1 | 2 | 1 | 2 | 11 | 9 | 46 | 14 | 57 | 17 | | | | | | |
| 9 | 10 | 62 | 9 | 27 | 1 | 1 | 2 | 3 | 3 | 3 | 29 | 14 | 45 | 19 | 74 | 24 | | | | | | |
| 9 | 17 | 62 | 10 | 10 | 0 | 1 | 0 | 2 | 0 | 2 | 5 | 9 | 30 | 16 | 35 | 18 | | | | | | |
| 9 | 24 | 62 | 10 | 18 | 0 | 1 | 0 | 3 | 0 | 3 | 0 | 13 | 33 | 16 | 33 | 21 | | | | | | |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 8 | 17 | 62 | 9 | 17 | 5000 | 127 | 37 | 90 | 1 | 9 | 17 | 3 | 2 | 12 | 0 | 3 | 2 | 1 | 5 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 8 | 20 | 62 | - | - | - | - | - | - | - | - | 46 | 312 | 336 | 5 | - | 70 | .0 | 463 | - |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | 50 | 328 | 344 | 10 | - | 76 | .0 | 498 | - |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | 51 | 320 | 364 | 10 | 25 | 78 | .1 | 511 | - |
| 9 | 10 | 62 | - | - | - | - | - | - | - | - | 52 | 324 | 348 | 10 | 25 | 76 | .0 | 510 | - |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | 57 | 332 | 348 | 10 | *25 | 9 | .1 | 532 | - |
| 9 | 24 | 62 | - | - | 8.2 | - | - | - | - | - | 58 | 340 | 390 | 10 | *25 | 75 | .0 | 570 | - |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Preston, Idaho
Operated by U.S. Geological Survey

MAJOR BASIN Great Basin

MINOR BASIN Great Salt Lake

STATION LOCATION Bear River above
Preston, Idaho

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .357 | .273 | .466 | .295 | .489 | .610 | .710 | 1.590 | .459 | .633 | .712 | .556 |
| 2 | .292 | .263 | .371 | .303 | .433 | .980 | .625 | 1.320 | .513 | .632 | .479 | .309 |
| 3 | .197 | .433 | .130 | .337 | .467 | .490 | 1.100 | 1.300 | .325 | .671 | .437 | .705 |
| 4 | .363 | .210 | .379 | .364 | .171 | .402 | 1.050 | 1.340 | .444 | .742 | .414 | .574 |
| 5 | .368 | .166 | .484 | .361 | .421 | .483 | 1.120 | 1.320 | .555 | .858 | .332 | .728 |
| 6 | .265 | .280 | .422 | .337 | .569 | .536 | 1.490 | 1.200 | .473 | 1.070 | .398 | .542 |
| 7 | .257 | .260 | .488 | .281 | .444 | .445 | 1.430 | 1.050 | .418 | 1.360 | .319 | .478 |
| 8 | .285 | .236 | .472 | .405 | .400 | .604 | 1.690 | 1.300 | .350 | 1.150 | .404 | .465 |
| 9 | .454 | .304 | .299 | .531 | .541 | .497 | 1.670 | 1.040 | .408 | 1.380 | .457 | .287 |
| 10 | .128 | .462 | .182 | .365 | 1.540 | .633 | 1.510 | 1.470 | .487 | 1.120 | .427 | .248 |
| 11 | .260 | .108 | .419 | .423 | 3.790 | .534 | 1.720 | 1.220 | .481 | .963 | .537 | .149 |
| 12 | .202 | .154 | .213 | .381 | 3.940 | .527 | 1.470 | 1.220 | .398 | .946 | .500 | .187 |
| 13 | .409 | .371 | .221 | .387 | 3.260 | .562 | 1.660 | .861 | .287 | .924 | .540 | .143 |
| 14 | .282 | .316 | .266 | .242 | 2.020 | .657 | 1.670 | 1.070 | .198 | .902 | .442 | .186 |
| 15 | .239 | .394 | .290 | .364 | 1.800 | .573 | 1.480 | 1.070 | .157 | .618 | .536 | .159 |
| 16 | .248 | .382 | .281 | .347 | 1.490 | .402 | 1.620 | .992 | .123 | .747 | .451 | .099 |
| 17 | .245 | .461 | .167 | .397 | 1.230 | .545 | 1.480 | .920 | .172 | .691 | .660 | .231 |
| 18 | .317 | .232 | .233 | .433 | 1.110 | .202 | 1.720 | .832 | .133 | .510 | .420 | .143 |
| 19 | .336 | .130 | .245 | .406 | .930 | .349 | 1.280 | .367 | .137 | .490 | .552 | .151 |
| 20 | .246 | .213 | .571 | .509 | .813 | .560 | 1.650 | .168 | .222 | .546 | .550 | .192 |
| 21 | .351 | .436 | .706 | .120 | .933 | .609 | 1.520 | .521 | .306 | .653 | .553 | .141 |
| 22 | .152 | .524 | .601 | .444 | .765 | .788 | 1.400 | .393 | .400 | .624 | .768 | .139 |
| 23 | .397 | .136 | .170 | .397 | .589 | .583 | 1.580 | .278 | .391 | .521 | .603 | .209 |
| 24 | .188 | .364 | .122 | .370 | .728 | .597 | 1.630 | .248 | .319 | .466 | .705 | .181 |
| 25 | .281 | .370 | .183 | .388 | .348 | .293 | 1.820 | .347 | .450 | .471 | .745 | .158 |
| 26 | .267 | .266 | .471 | .425 | .689 | .658 | 1.720 | .253 | .602 | .472 | .734 | .138 |
| 27 | .351 | .412 | .493 | .380 | .885 | .791 | 1.610 | .194 | .896 | .457 | .637 | .196 |
| 28 | .372 | .363 | .371 | .322 | 1.040 | .874 | 1.830 | .362 | .658 | .469 | .613 | .171 |
| 29 | .227 | .474 | .415 | .336 |  | .721 | 1.550 | .424 | .575 | .465 | .738 | .246 |
| 30 | .245 | .425 | .366 | .539 |  | .662 | 1.440 | .482 | .620 | .516 | .688 | .202 |
| 31 | .308 |  | .194 | .451 |  | .826 |  | .419 |  | .465 | .693 |  |

# PLANKTON POPULATION

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** YELLOWSTONE RIVER

**STATION LOCATION** BIG HORN RIVER AT

HARDIN, MONTANA 104

| DATE OF SAMPLE | | | TOTAL | ALGAE *(Number per milliliter)* | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 12 | 18 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 70 | 0 | 50 | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 0 | 110 | | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 100 | 0 | 0 | 0 | 0 | 50 | 0 | 0 | 50 | 20 | 50 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 380 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 700 | 0 | 0 | 0 | 0 | 20 | 0 | 50 | 630 | 0 | 230 | 87 | 1 | 82 | 1 | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 2200 | 0 | 0 | 0 | 0 | 40 | 1990 | 60 | 120 | 0 | 20 | 60 | 4 | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 700 | 0 | 0 | 0 | 0 | 20 | 0 | 60 | 620 | 0 | 170 | 82 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 1000 | 0 | 0 | 0 | 0 | 50 | 0 | 20 | 930 | 0 | 140 | 87 | 2 | 85 | 1 | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 4300 | 0 | 0 | 20 | 0 | 170 | 20 | 1590 | 2550 | 390 | 480 | 71 | 4 | 92 | 3 | 82 | 3 | 87 | 2 | | | | | | | | | | | | |
| 5 | 7 | 62 | 3100 | 0 | 0 | 190 | 0 | 20 | 0 | 460 | 2420 | 0 | 60 | 82 | 3 | 71 | 2 | 92 | 2 | 85 | 1 | 38 | 1 | 91 | 1 | | | | | | | | |
| 5 | 21 | 62 | 1000 | 0 | 20 | 70 | 0 | 0 | 50 | 380 | 510 | 160 | 160 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 700 | 0 | 0 | 20 | 0 | 0 | 20 | 200 | 420 | 50 | 720 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 200 | 0 | 0 | 20 | 0 | 40 | 0 | 50 | 70 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 2400 | 20 | 0 | 40 | 0 | 600 | 0 | 250 | 1530 | 40 | 330 | 57 | 2 | 82 | 2 | 92 | 2 | 71 | 1 | 87 | 1 | | | | | | | | | | |
| 8 | 6 | 62 | 800 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 700 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 2100 | 80 | 0 | 40 | 0 | 390 | 0 | 330 | 1200 | 0 | 40 | 87 | 3 | 68 | 1 | 51 | 1 | 92 | 1 | 52 | 1 | | | | | | | | | | |
| 9 | 4 | 62 | 500 | 0 | 0 | 30 | 0 | 10 | 0 | 10 | 470 | 0 | 810 | 87 | 1 | | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 900 | 0 | 0 | 140 | 0 | 80 | 0 | 150 | 490 | 20 | 1690 | 87 | 1 | | | | | | | | | | | | | | | | | | |

STATE MONTANA

# PLANKTON POPULATION

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** YELLOWSTONE RIVER

**STATION LOCATION** BIG HORN RIVER AT
HARDIN, MONTANA

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA *(Identifiable) Number per ml.* | MICROINVERTEBRATES ROTIFERS NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | CRUSTACEA NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* 1ST | | 2ND | | 3RD | | NEMATODES | [illegible] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 12 | 18 | 61 | | | | | | | | | | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | - | - |
| 1 | 2 | 62 | | | | | | | | | | 0 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | - | - |
| 1 | 15 | 62 | 92 | 14 | 36 | 13 | 65 | 10 | 47 | 5 | 58 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | - | - |
| 2 | 5 | 62 | 92 | 16 | 36 | 9 | 75 | 7 | 16 | 6 | 62 | 110 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | - | - |
| 2 | 19 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | - | - |
| 3 | 5 | 62 | 36 | 16 | 47 | 14 | 92 | 9 | 65 | 6 | 55 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | - | - |
| 3 | 19 | 62 | 36 | 43 | 92 | 16 | 15 | 6 | 65 | 6 | 29 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | - | - |
| 4 | 2 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | - | - |
| 4 | 16 | 62 | 92 | 32 | 36 | 27 | 65 | 12 | 51 | 4 | 25 | 20 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | - | - |
| 5 | 7 | 62 | 36 | 28 | 92 | 13 | 80 | 10 | 65 | 6 | 43 | 0 | 0 | 0 | | | | | | | | | | | 4 | | | | | | | - | - |
| 5 | 21 | 62 | | | | | | | | | | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | - | - |
| 6 | 4 | 62 | 36 | 20 | 65 | 16 | 80 | 11 | 92 | 7 | 46 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | - | - |
| 6 | 18 | 62 | | | | | | | | | | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 7 | 2 | 62 | 47 | 32 | 80 | 18 | 36 | 13 | 92 | 12 | 25 | 40 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 6 | 62 | 16 | 24 | 32 | 15 | 65 | 14 | 47 | 7 | 40 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 20 | 62 | 65 | 15 | 47 | 13 | 92 | 12 | 66 | 12 | 48 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | - | - |
| 9 | 4 | 62 | 65 | 20 | 66 | 11 | 36 | 10 | 64 | 8 | 51 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | - | - |
| 9 | 17 | 62 | 65 | 29 | 36 | 18 | 33 | 7 | 64 | 6 | 40 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | - | - |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** YELLOWSTONE RIVER

**STATION LOCATION** BIG HORN RIVER AT
HARDIN, MONTANA 104

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 12 | 26 | 61 | 1 | 4 | 1 | 1 | 10 | 6 | 11 | 6 | 8 | 8 | 27 | 13 | 35 | 15 | | | | | | |
| 1 | 2 | 62 | 1 | 12 | 0 | 2 | 6 | 5 | 6 | 5 | 12 | 17 | 36 | 22 | 48 | 28 | | | | | | |
| 1 | 8 | 62 | 1 | 19 | 1 | 2 | 8 | 6 | 9 | 6 | 18 | 17 | 29 | 21 | 47 | 27 | | | | | | |
| 1 | 15 | 62 | 1 | 29 | 1 | 3 | 10 | 6 | 11 | 7 | 17 | 17 | 40 | 21 | 57 | 27 | | | | | | |
| 1 | 22 | 62 | 2 | 8 | 0 | 1 | 11 | 5 | 11 | 5 | 5 | 8 | 30 | 13 | 35 | 15 | | | | | | |
| 1 | 29 | 62 | 2 | 12 | 0 | 3 | 5 | 4 | 5 | 5 | 66 | 19 | 48 | 20 | 114 | 28 | | | | | | |
| 2 | 5 | 62 | 2 | 15 | 9 | 5 | 5 | 4 | 14 | 7 | 53 | 22 | 59 | 21 | 112 | 30 | | | | | | |
| 2 | 12 | 62 | 2 | 27 | 6 | 9 | 0 | 5 | 6 | 10 | 74 | 30 | 47 | 26 | 121 | 40 | | | | | | |
| 2 | 19 | 62 | 3 | 8 | 18 | 13 | 3 | 4 | 21 | 14 | 143 | 20 | 47 | 13 | 190 | 24 | | | | | | |
| 2 | 26 | 62 | 3 | 13 | 1 | 1 | 7 | 4 | 8 | 4 | 64 | 11 | 33 | 13 | 97 | 17 | | | | | | |
| 3 | 5 | 62 | 3 | 19 | 0 | 2 | 7 | 5 | 7 | 5 | 13 | 23 | 17 | 27 | 30 | 35 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | 4 | 3 | 13 | 5 | 17 | 6 | 28 | 12 | 39 | 13 | 67 | 18 | | | | | | |
| 3 | 19 | 62 | 4 | 2 | 8 | 6 | 6 | 3 | 14 | 7 | 42 | 16 | 23 | 14 | 65 | 21 | | | | | | |
| 3 | 26 | 62 | 4 | 10 | 16 | 12 | 1 | 4 | 17 | 13 | 104 | 32 | 24 | 21 | 128 | 38 | | | | | | |
| 4 | 2 | 62 | 4 | 17 | 17 | 11 | 7 | 5 | 24 | 12 | 51 | 27 | 38 | 21 | 89 | 34 | | | | | | |
| 4 | 9 | 62 | 4 | 26 | 0 | 3 | 2 | 5 | 2 | 6 | 43 | 21 | 30 | 23 | 73 | 31 | | | | | | |
| 4 | 16 | 62 | 5 | 23 | 3 | 3 | 11 | 6 | 14 | 7 | 30 | 25 | 29 | 27 | 59 | 37 | | | | | | |
| 4 | 23 | 62 | 7 | 11 | 30 | 20 | 6 | 4 | 36 | 15 | 201 | 54 | 36 | 16 | 237 | 56 | | | | | | |
| 4 | 30 | 62 | 6 | 6 | 20 | 11 | 9 | 4 | 29 | 12 | 66 | 41 | 33 | 16 | 99 | 44 | | | | | | |
| 5 | 7 | 62 | 6 | 13 | 4 | 5 | 6 | 4 | 10 | 7 | 38 | 24 | 24 | 19 | 62 | 31 | | | | | | |
| 5 | 14 | 62 | 6 | 25 | 19 | 10 | 4 | 3 | 23 | 10 | 110 | 14 | 43 | 9 | 153 | 17 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | 18 | 32 | 5 | 4 | 23 | 32 | 523 | 72 | 115 | 30 | 638 | 78 | | | | | | |
| 5 | 28 | 62 | 7 | 11 | 30 | 26 | 8 | 5 | 38 | 26 | 247 | 61 | 48 | 16 | 295 | 63 | | | | | | |
| 6 | 4 | 62 | 7 | 5 | 43 | 23 | 5 | 4 | 48 | 23 | 165 | 80 | 39 | 16 | 204 | 82 | | | | | | |
| 6 | 12 | 62 | 7 | 13 | 7 | 5 | 7 | 4 | 14 | 7 | 33 | 36 | 19 | 10 | 52 | 37 | | | | | | |
| 6 | 18 | 62 | 7 | 17 | 0 | 21 | 1 | 1 | 1 | 21 | 1580 | 301 | 32 | 16 | 1612 | 301 | | | | | | |
| 6 | 25 | 62 | 7 | 24 | 0 | 39 | 2 | 2 | 2 | 39 | 32 | 39 | 23 | 13 | 55 | 41 | | | | | | |
| 7 | 2 | 62 | 8 | 1 | 13 | 16 | 5 | 3 | 18 | 16 | 131 | 78 | 55 | 9 | 186 | 79 | | | | | | |
| 7 | 9 | 62 | 8 | 6 | 4 | 4 | 2 | 2 | 6 | 4 | 46 | 21 | 37 | 17 | 83 | 27 | | | | | | |
| 7 | 16 | 62 | 8 | 16 | 472 | 260 | 4 | 4 | 476 | 260 | 336 | 63 | 92 | 18 | 428 | 66 | | | | | | |
| 7 | 23 | 62 | 8 | 21 | 6 | 5 | 1 | 5 | 7 | 7 | 49 | 17 | 45 | 16 | 94 | 23 | | | | | | |
| 7 | 28 | 62 | 9 | 6 | 20 | 17 | 3 | 4 | 23 | 17 | 205 | 55 | 45 | 34 | 250 | 65 | | | | | | |
| 8 | 6 | 62 | 8 | 27 | 11 | 21 | 3 | 4 | 14 | 21 | 227 | 42 | 48 | 5 | 275 | 42 | | | | | | |
| 8 | 13 | 62 | 8 | 30 | 143 | 85 | 6 | 4 | 149 | 85 | 900 | 230 | 76 | 28 | 976 | 232 | | | | | | |
| 8 | 20 | 62 | 9 | 6 | 1 | 3 | 6 | 6 | 7 | 7 | 16 | 24 | 60 | 28 | 76 | 37 | | | | | | |
| 8 | 27 | 62 | 9 | 14 | 7 | 5 | 6 | 5 | 13 | 7 | 50 | 33 | 25 | 34 | 75 | 47 | | | | | | |
| 9 | 4 | 62 | 9 | 20 | 0 | 2 | 3 | 4 | 3 | 4 | 13 | 22 | 44 | 30 | 57 | 37 | | | | | | |
| 9 | 10 | 62 | 10 | 2 | 0 | 1 | 4 | 4 | 4 | 4 | 6 | 15 | 42 | 21 | 48 | 26 | | | | | | |
| 9 | 17 | 62 | 10 | 15 | 3 | 3 | 10 | 5 | 13 | 6 | 21 | 15 | 29 | 18 | 50 | 23 | | | | | | |
| 9 | 24 | 62 | 10 | 23 | 22 | 21 | 6 | 4 | 28 | 21 | 289 | 145 | 54 | 28 | 343 | 148 | | | | | | |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 11 | 19 | 61 | 2.0 | - | 8.4 | - | - | - | - | - | - | - | 420 | - | 30 | - | - | - | - |
| 11 | 25 | 61 | 3.0 | - | 8.6 | - | - | - | - | - | - | - | 370 | - | 53 | - | - | - | - |
| 12 | 26 | 61 | - | - | - | - | - | - | - | - | 15 | 186 | - | 10 | - | 325 | .1 | 718 | - |
| 1 | 2 | 62 | 2.5 | - | 8.6 | - | - | - | - | - | - | 190 | 360 | - | 30 | - | - | - | - |
| 1 | 8 | 62 | 3.0 | - | 8.6 | - | - | - | - | - | 13 | 200 | 360 | 5 | 45 | 269 | .0 | 697 | - |
| 1 | 15 | 62 | 2.0 | - | 8.6 | - | - | - | - | - | 12 | 280 | 384 | - | 25 | 306 | .0 | 673 | - |
| 1 | 22 | 62 | 2.5 | - | 8.6 | - | - | - | - | - | 13 | 220 | 400 | - | 10 | 325 | .0 | 851 | - |
| 1 | 29 | 62 | 2.5 | - | 8.6 | - | - | - | - | - | 13 | 200 | 340 | 16 | 50 | 338 | .0 | 701 | - |
| 2 | 5 | 62 | .0 | - | 8.6 | - | - | - | - | - | 15 | 180 | 304 | - | 475 | 312 | .0 | 695 | - |
| 2 | 12 | 62 | 2.0 | - | 8.6 | - | - | - | - | - | 14 | 180 | 340 | 10 | 550 | 300 | - | - | - |
| 2 | 19 | 62 | 1.0 | - | 8.6 | - | - | - | - | - | 11 | 140 | 320 | 10 | 1500 | 312 | .0 | 616 | - |
| 2 | 26 | 62 | .5 | - | 8.6 | - | - | - | - | - | 15 | 212 | 392 | 10 | 28 | 325 | .0 | - | - |
| 3 | 5 | 62 | 1.0 | - | 8.6 | - | - | - | - | - | 16 | 220 | 300 | 5 | 35 | 337 | - | 633 | - |
| 3 | 12 | 62 | 1.0 | - | 8.6 | - | - | - | - | - | - | 160 | 288 | - | 350 | - | - | - | - |
| 3 | 19 | 62 | 5.0 | - | 8.6 | - | - | - | - | - | 22 | 168 | 280 | 5 | 3000 | 265 | .0 | 632 | - |
| 3 | 26 | 62 | 8.0 | - | 8.6 | - | - | - | - | - | 14 | 180 | 320 | 10 | 2000 | 350 | .0 | 726 | - |
| 4 | 2 | 62 | 8.5 | - | 8.4 | - | - | - | - | - | 16 | 180 | 340 | 5 | 1500 | 362 | .0 | 781 | - |
| 4 | 9 | 62 | 8.0 | - | 8.6 | - | - | - | - | - | 18 | 220 | 440 | 10 | 440 | 463 | .0 | 891 | - |
| 4 | 16 | 62 | 14.0 | - | 8.6 | - | - | - | - | - | 17 | 180 | 360 | 5 | 200 | 370 | - | 803 | - |
| 4 | 23 | 62 | 16.0 | - | 8.4 | - | - | - | - | - | 7 | 180 | 300 | - | 2000 | 290 | .0 | 554 | - |
| 4 | 30 | 62 | 12.0 | - | 8.4 | - | - | - | - | - | 13 | 170 | 260 | 10 | 825 | 250 | .1 | 620 | - |
| 5 | 7 | 62 | 12.0 | - | 8.6 | - | - | - | - | - | 13 | 180 | 260 | 10 | 625 | 275 | .0 | 600 | - |
| 5 | 14 | 62 | 13.5 | - | 8.4 | - | - | - | - | - | 9 | 104 | 228 | 15 | 550 | 238 | .0 | 484 | - |
| 5 | 21 | 62 | 16.5 | - | 8.6 | - | - | - | - | - | 16 | 148 | 292 | 10 | 2000 | 337 | .0 | 710 | - |
| 5 | 28 | 62 | 19.0 | - | 8.6 | - | - | - | - | - | - | 180 | 200 | - | 9000 | - | - | - | - |
| 6 | 4 | 62 | 16.0 | - | 8.4 | - | - | - | - | - | 10 | 160 | 280 | 10 | 1500 | 275 | .0 | 635 | - |
| 6 | 11 | 62 | 20.0 | - | 8.6 | - | - | - | - | - | 11 | 150 | 300 | 20 | 600 | 312 | .0 | 710 | - |
| 6 | 18 | 62 | 23.0 | - | 8.6 | - | - | - | - | - | - | 180 | 250 | - | 9000 | - | - | - | - |
| 6 | 25 | 62 | 26.0 | - | 8.6 | - | - | - | - | - | 15 | 140 | 185 | 10 | 2000 | 150 | - | 449 | - |
| 7 | 2 | 62 | 23.5 | - | 8.6 | - | - | - | - | - | - | 128 | 140 | - | 1000 | - | - | - | - |
| 7 | 9 | 62 | 23.0 | - | 8.6 | - | - | - | - | - | 10 | 120 | 170 | 5 | 270 | 30 | - | 377 | - |
| 7 | 16 | 62 | 21.5 | - | 8.6 | - | - | - | - | - | 11 | 190 | 250 | 5 | 9000 | 287 | .0 | 707 | - |
| 7 | 23 | 62 | 25.0 | - | 8.6 | - | - | - | - | - | 9 | 180 | 300 | 15 | 600 | 300 | .0 | 689 | - |
| 7 | 28 | 62 | 24.0 | - | 8.6 | - | - | - | - | - | 12 | 260 | 380 | 10 | 2000 | 388 | .0 | 828 | - |
| 8 | 6 | 62 | 24.0 | - | 8.6 | - | - | - | - | - | 12 | 170 | 308 | 10 | 1500 | 338 | - | - | - |
| 8 | 13 | 62 | 27.5 | - | 8.6 | - | - | - | - | - | 12 | 240 | 340 | - | 7500 | 350 | .0 | 742 | - |
| 8 | 20 | 62 | 26.0 | - | 8.6 | - | - | - | - | - | 14 | 250 | 340 | 10 | 260 | 350 | .0 | 772 | - |
| 8 | 27 | 62 | 20.0 | - | 8.6 | - | - | - | - | - | - | 220 | 330 | - | 550 | - | - | - | - |
| 9 | 4 | 62 | 16.0 | - | 8.6 | - | - | - | - | - | 13 | 260 | 340 | 5 | 270 | 363 | .0 | 750 | - |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 9 | 10 | 62 | 18.0 | - | 8.6 | - | - | - | - | - | 12 | 180 | 320 | 5 | 140 | 350 | .0 | 720 | - |
| 9 | 17 | 62 | 18.5 | 9.4 | 8.6 | - | - | - | - | - | - | 180 | 340 | - | 140 | - | - | - | - |
| 9 | 24 | 62 | 17.5 | 8.6 | 8.6 | - | - | - | - | - | - | 180 | 320 | - | 2000 | - | - | - | - |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near St. Xavier, Montana
Operated by U.S. Geological Survey

MAJOR BASIN Missouri River

MINOR BASIN Yellowstone River

STATION LOCATION Big Horn River at
Hardin, Montana

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.730 | 2.310 | 2.800 | 2.400 | 2.400 | 2.920 | 4.280 | 4.700 | 4.870 | 11.400 | 3.720 | 2.880 |
| 2 | 2.750 | 2.480 | 2.760 | 2.500 | 2.620 | 3.360 | 4.280 | 4.470 | 5.100 | 10.500 | 3.880 | 2.800 |
| 3 | 2.750 | 2.520 | 2.760 | 2.600 | 3.120 | 3.560 | 3.600 | 4.250 | 5.270 | 9.640 | 4.130 | 2.870 |
| 4 | 2.740 | 2.560 | 2.840 | 2.500 | 3.080 | 3.520 | 2.800 | 4.020 | 5.540 | 9.460 | 3.990 | 2.920 |
| 5 | 2.720 | 2.700 | 2.800 | 2.300 | 3.520 | 3.780 | 2.400 | 3.850 | 6.170 | 8.570 | 3.720 | 2.990 |
| 6 | 2.840 | 2.730 | 2.700 | 2.400 | 3.280 | 3.400 | 2.300 | 3.760 | 5.640 | 7.680 | 3.480 | 2.990 |
| 7 | 2.980 | 2.760 | 2.660 | 2.300 | 3.280 | 3.640 | 2.300 | 3.760 | 5.140 | 7.030 | 3.310 | 2.880 |
| 8 | 2.680 | 2.880 | 2.620 | 2.100 | 3.080 | 4.360 | 2.700 | 4.060 | 4.970 | 7.040 | 3.030 | 2.830 |
| 9 | 2.640 | 2.840 | 2.070 | 1.800 | 3.120 | 5.150 | 3.400 | 4.190 | 4.730 | 5.820 | 2.750 | 3.180 |
| 10 | 3.040 | 2.880 | 1.710 | 1.600 | 3.320 | 6.620 | 3.700 | 4.280 | 4.520 | 5.020 | 2.600 | 3.770 |
| 11 | 5.400 | 2.920 | 1.100 | 2.000 | 3.600 | 6.050 | 3.700 | 4.350 | 4.760 | 4.790 | 5.220 | 3.630 |
| 12 | 4.000 | 3.040 | .900 | 1.900 | 3.960 | 5.050 | 3.600 | 4.170 | 5.260 | 4.210 | 4.050 | 3.350 |
| 13 | 3.320 | 3.000 | 1.000 | 1.700 | 4.590 | 4.280 | 3.600 | 3.950 | 6.060 | 4.270 | 3.660 | 3.180 |
| 14 | 3.080 | 2.920 | 1.300 | 1.500 | 10.600 | 4.280 | 3.700 | 3.670 | 6.640 | 7.350 | 3.420 | 2.990 |
| 15 | 2.880 | 2.880 | 1.800 | 1.400 | 11.500 | 4.100 | 3.900 | 3.330 | 6.860 | 8.680 | 3.130 | 2.950 |
| 16 | 2.700 | 2.880 | 2.200 | 1.400 | 6.300 | 4.320 | 4.300 | 3.390 | 8.960 | 5.180 | 2.790 | 2.910 |
| 17 | 2.560 | 2.700 | 2.400 | 1.300 | 4.320 | 4.680 | 4.500 | 3.210 | 8.420 | 5.180 | 2.680 | 2.880 |
| 18 | 2.620 | 2.560 | 2.300 | 1.200 | 3.640 | 5.700 | 4.500 | 3.140 | 6.740 | 4.240 | 2.560 | 2.800 |
| 19 | 2.620 | 2.480 | 2.200 | 1.000 | 4.050 | 5.000 | 4.300 | 3.150 | 6.320 | 4.100 | 2.500 | 2.700 |
| 20 | 2.520 | 2.420 | 2.300 | 1.000 | 3.740 | 5.050 | 4.400 | 3.150 | 7.590 | 3.910 | 2.330 | 2.690 |
| 21 | 2.590 | 2.660 | 2.400 | 1.000 | 3.280 | 5.150 | 4.700 | 3.230 | 7.990 | 3.470 | 2.240 | 2.730 |
| 22 | 2.620 | 2.660 | 2.200 | 1.000 | 2.840 | 5.200 | 5.100 | 3.500 | 8.370 | 2.960 | 2.100 | 3.190 |
| 23 | 2.730 | 2.730 | 2.300 | 1.100 | 2.240 | 5.050 | 5.400 | 3.660 | 8.790 | 2.640 | 2.130 | 3.700 |
| 24 | 2.520 | 2.730 | 2.400 | 1.400 | 1.770 | 4.770 | 5.200 | 3.780 | 9.640 | 2.460 | 2.650 | 3.840 |
| 25 | 2.340 | 2.760 | 2.300 | 1.600 | 1.800 | 4.640 | 5.200 | 3.820 | 11.400 | 2.300 | 2.540 | 3.590 |
| 26 | 2.450 | 2.800 | 2.000 | 1.800 | 1.900 | 4.500 | 5.500 | 4.640 | 12.300 | 2.180 | 2.510 | 3.500 |
| 27 | 2.450 | 2.760 | 1.800 | 2.000 | 2.000 | 4.460 | 5.400 | 8.080 | 12.000 | 2.360 | 2.440 | 3.500 |
| 28 | 2.450 | 2.800 | 1.800 | 2.100 | 2.200 | 4.540 | 5.300 | 6.120 | 12.500 | 3.620 | 2.440 | 3.500 |
| 29 | 2.450 | 2.800 | 2.000 | 2.200 |  | 4.680 | 5.200 | 5.660 | 12.900 | 3.410 | 2.570 | 3.460 |
| 30 | 2.380 | 2.730 | 2.100 | 2.200 |  | 4.590 | 4.880 | 4.850 | 11.600 | 3.410 | 2.860 | 3.420 |
| 31 | 2.280 |  | 2.200 | 2.300 |  | 4.320 |  | 4.790 |  | 3.420 | 2.880 |  |

# RADIOACTIVITY DETERMINATIONS

BIG SIOUX RIVER

**STATION LOCATION** BIG SIOUX RIVER BELOW
SIOUX FALLS, SOUTH DAKOTA

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 4 | 61 | 10 | 18 | 0 | 2 | 0 | 4 | 0 | 4 | 0 | 26 | 57 | 34 | 57 | 43 | | | | | | |
| 10 | 11 | 61 | 10 | 25 | 3 | 2 | 6 | 4 | 9 | 4 | 92 | 12 | 177 | 16 | 269 | 20 | | | | | | |
| 10 | 18 | 61 | 11 | 2 | 1 | 2 | 3 | 5 | 4 | 5 | 12 | 19 | 50 | 27 | 62 | 33 | | | | | | |
| 10 | 25 | 61 | 11 | 2 | 0 | 2 | 3 | 5 | 3 | 5 | 11 | 20 | 17 | 27 | 28 | 34 | | | | | | |
| 11 | 1 | 61 | 11 | 10 | 0 | 2 | 4 | 5 | 4 | 5 | 41 | 17 | 96 | 24 | 137 | 29 | | | | | | |
| 11 | 8 | 61 | 11 | 24 | 2 | 2 | 3 | 4 | 5 | 4 | 79 | 20 | 227 | 32 | 306 | 38 | | | | | | |
| 11 | 15 | 61 | 11 | 28 | 0 | 2 | 0 | 4 | 0 | 4 | 1 | 22 | 100 | 30 | 101 | 37 | | | | | | |
| 11 | 22 | 61 | 11 | 30 | 1 | 2 | 0 | 3 | 1 | 4 | 54 | 20 | 147 | 28 | 201 | 34 | | | | | | |
| 11 | 29 | 61 | 12 | 6 | 6 | 5 | 2 | 3 | 8 | 6 | 92 | 16 | 66 | 14 | 158 | 21 | | | | | | |
| 12 | 6 | 61 | 12 | 14 | 1 | 2 | 1 | 3 | 2 | 4 | 28 | 17 | 35 | 22 | 63 | 28 | | | | | | |
| 12 | 13 | 61 | 12 | 21 | 0 | 2 | 0 | 5 | 0 | 5 | 15 | 21 | 98 | 30 | 113 | 37 | | | | | | |
| 12 | 20 | 61 | 1 | 2 | 0 | 2 | 1 | 5 | 1 | 5 | 10 | 20 | 43 | 27 | 53 | 34 | | | | | | |
| 12 | 27 | 61 | 1 | 9 | 5 | 4 | 48 | 13 | 53 | 14 | 57 | 20 | 65 | 27 | 122 | 34 | | | | | | |
| 1 | 3 | 62 | 1 | 15 | 2 | 3 | 1 | 6 | 3 | 7 | 11 | 20 | 37 | 29 | 48 | 35 | | | | | | |
| 1 | 10 | 62 | 1 | 18 | 5 | 5 | 4 | 7 | 9 | 9 | 37 | 39 | 39 | 47 | 76 | 61 | | | | | | |
| 1 | 17 | 62 | 1 | 30 | 0 | 5 | 2 | 10 | 2 | 11 | 223 | 47 | 61 | 54 | 284 | 72 | | | | | | |
| 1 | 23 | 62 | 2 | 7 | 1 | 5 | 5 | 8 | 6 | 9 | 20 | 38 | 36 | 48 | 56 | 61 | | | | | | |
| 2 | 7 | 62 | 2 | 16 | 0 | 2 | 3 | 5 | 3 | 6 | 56 | 17 | 174 | 26 | 230 | 31 | | | | | | |
| 2 | 14 | 62 | 3 | 1 | 0 | 2 | 0 | 4 | 0 | 4 | 64 | 14 | 162 | 21 | 226 | 25 | | | | | | |
| 2 | 21 | 62 | 3 | 8 | 0 | 1 | 1 | 3 | 1 | 3 | 111 | 12 | 240 | 16 | 351 | 20 | | | | | | |
| 2 | 28 | 62 | 3 | 13 | 2 | 2 | 4 | 5 | 6 | 5 | 63 | 17 | 195 | 26 | 258 | 29 | | | | | | |
| 3 | 7 | 62 | 3 | 19 | 0 | 2 | 0 | 4 | 0 | 5 | 28 | 19 | 104 | 28 | 132 | 34 | | | | | | |
| 3 | 14 | 62 | 3 | 28 | 1 | 2 | 2 | 5 | 3 | 5 | 42 | 20 | 88 | 27 | 130 | 34 | | | | | | |
| 3 | 21 | 62 | 4 | 4 | 0 | 3 | 2 | 5 | 2 | 6 | 56 | 20 | 103 | 27 | 159 | 34 | | | | | | |
| 3 | 28 | 62 | 4 | 10 | 55 | 45 | 0 | 1 | 55 | 45 | 701 | 90 | 139 | 86 | 840 | 124 | | | | | | |
| 4 | 4 | 62 | 4 | 20 | 4 | 3 | 0 | 1 | 4 | 3 | 30 | 7 | 94 | 7 | 124 | 10 | | | | | | |
| 4 | 11 | 62 | 4 | 27 | 2 | 1 | 1 | 1 | 2 | 1 | 44 | 6 | 78 | 67 | 122 | 9 | | | | | | |
| 4 | 18 | 62 | 4 | 30 | 1 | 1 | 5 | 3 | 6 | 3 | 7 | 8 | 71 | 12 | 78 | 14 | | | | | | |
| 4 | 25 | 62 | 6 | 1 | 2 | 1 | 3 | 3 | 5 | 3 | 15 | 14 | 61 | 18 | 76 | 23 | | | | | | |
| 5 | 9 | 62 | 6 | 15 | 0 | 1 | 5 | 4 | 5 | 4 | 9 | 10 | 59 | 16 | 68 | 19 | | | | | | |
| 5 | 16 | 62 | 6 | 22 | 0 | 1 | 0 | 1 | 0 | 1 | 17 | 7 | 79 | 8 | 96 | 11 | | | | | | |
| 5 | 20 | 62 | 6 | 25 | 1 | 1 | 5 | 3 | 6 | 3 | 5 | 9 | 43 | 13 | 48 | 16 | | | | | | |
| 5 | 23 | 62 | 6 | 29 | 2 | 3 | 0 | 3 | 2 | 4 | 143 | 17 | 108 | 15 | 251 | 23 | | | | | | |
| 5 | 31 | 62 | 7 | 2 | 1 | 3 | 1 | 2 | 2 | 4 | 85 | 30 | 99 | 15 | 184 | 34 | | | | | | |
| 6 | 6 | 62 | 7 | 6 | 2 | 2 | 3 | 3 | 5 | 4 | 39 | 12 | 108 | 16 | 147 | 20 | | | | | | |
| 6 | 12 | 62 | 7 | 12 | - | - | - | - | - | - | 38 | 32 | 100 | 18 | 138 | 37 | | | | | | |
| 6 | 20 | 62 | 7 | 17 | 0 | 3 | 1 | 3 | 1 | 4 | 6 | 26 | 75 | 16 | 81 | 31 | | | | | | |
| 6 | 27 | 62 | 7 | 25 | 0 | 1 | 4 | 3 | 4 | 3 | 7 | 12 | 74 | 16 | 81 | 20 | | | | | | |
| 7 | 3 | 62 | 8 | 6 | - | - | - | - | - | - | 17 | 10 | 63 | 12 | 80 | 16 | | | | | | |
| 7 | 11 | 62 | 8 | 13 | - | - | - | - | - | - | 49 | 11 | 103 | 12 | 152 | 16 | | | | | | |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** BIG SIOUX RIVER

**STATION LOCATION** BIG SIOUX RIVER BELOW
SIOUX FALLS, SOUTH DAKOTA 80

| DATE SAMPLE TAKEN | | | DATE OF DETERMINATION | | RADIOACTIVITY IN WATER | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 7 | 18 | 62 | 8 | 16 | 0 | 0 | 1 | 2 | 1 | 2 | 26 | 13 | 93 | 17 | 119 | 21 | | | | | | |
| 7 | 25 | 62 | 8 | 21 | - | - | - | - | - | - | 28 | 18 | 48 | 18 | 76 | 25 | | | | | | |
| 8 | 1 | 62 | 8 | 23 | - | - | - | - | - | - | 16 | 12 | 44 | 15 | 60 | 19 | | | | | | |
| 8 | 8 | 62 | 8 | 28 | - | - | - | - | - | - | 23 | 13 | 72 | 17 | 95 | 21 | | | | | | |
| 8 | 15 | 62 | 8 | 31 | - | - | - | - | - | - | 4 | 28 | 31 | 9 | 35 | 29 | | | | | | |
| 8 | 22 | 62 | 9 | 6 | 1 | 3 | 4 | 4 | 5 | 5 | 40 | 28 | 60 | 17 | 100 | 33 | | | | | | |
| 8 | 29 | 62 | 9 | 27 | - | - | - | - | - | - | 1 | 15 | 33 | 20 | 34 | 25 | | | | | | |
| 9 | 5 | 62 | 9 | 28 | - | - | - | - | - | - | 55 | 16 | 70 | 20 | 125 | 26 | | | | | | |
| 9 | 12 | 62 | 10 | 9 | - | - | - | - | - | - | 31 | 23 | 70 | 18 | 101 | 29 | | | | | | |
| 9 | 18 | 62 | 10 | 15 | 1 | 1 | 1 | 3 | 2 | 3 | 27 | 11 | 49 | 17 | 76 | 20 | | | | | | |
| 9 | 26 | 62 | 10 | 18 | - | - | - | - | - | - | 18 | 21 | 70 | 28 | 88 | 35 | | | | | | |

**STATION LOCATION** BIG SIOUX RIVER BELOW
SIOUX FALLS, SOUTH DAKOTA

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 4 | 61 | 11700 | 0 | 0 | 270 | 0 | 290 | 0 | 10390 | 770 | 520 | 80 | 71 | 5 | 68 | 6 | 69 | 3 | 88 | 2 | 38 | 1 | 89 | 1 | | | | | | | | |
| 10 | 18 | 61 | 3400 | 20 | 20 | 290 | 0 | 580 | 0 | 2050 | 460 | 150 | 100 | 68 | 3 | 71 | 3 | 51 | 2 | 88 | 1 | | | | | | | | | | | | |
| 11 | 8 | 61 | 13600 | 50 | 90 | 1050 | 0 | 400 | 0 | 11910 | 130 | 4960 | 250 | 71 | 7 | 38 | 2 | 25 | 2 | 57 | 2 | 68 | 2 | | | | | | | | | | |
| 11 | 20 | 61 | 8100 | 140 | 410 | 680 | 0 | 650 | 70 | 5380 | 770 | 1550 | 140 | 71 | 6 | 51 | 2 | 25 | 2 | 12 | 2 | 68 | 1 | 69 | 1 | 87 | 1 | 88 | 1 | | | | |
| 12 | 6 | 61 | 12600 | 0 | 130 | 100 | 0 | 390 | 0 | 11550 | 480 | 440 | 120 | 71 | 7 | 68 | 4 | 57 | 2 | 88 | 1 | | | | | | | | | | | | |
| 12 | 20 | 61 | 4000 | 110 | 230 | 50 | 0 | 410 | 0 | 2900 | 290 | 140 | 0 | 71 | 5 | 68 | 2 | 57 | 1 | 51 | 1 | | | | | | | | | | | | |
| 1 | 2 | 62 | 2200 | 20 | 70 | 40 | 0 | 70 | 0 | 1920 | 50 | 110 | 20 | | | | | | | | | | | | | | | | | | | | |
| 1 | 17 | 62 | 700 | 20 | 20 | 0 | 0 | 0 | 0 | 580 | 120 | 40 | 20 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 7 | 62 | 3600 | 0 | 1940 | 50 | 0 | 160 | 0 | 1010 | 500 | 230 | 50 | 71 | 3 | 16 | 3 | 11 | 3 | 12 | 2 | 88 | 1 | 68 | 1 | 51 | 1 | | | | | | |
| 2 | 22 | 62 | 1800 | 0 | 250 | 0 | 0 | 110 | 70 | 1180 | 200 | 160 | 110 | 16 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 7 | 62 | 800 | 120 | 190 | 0 | 0 | 230 | 0 | 210 | 100 | 40 | 20 | 15 | 1 | 51 | 1 | | | | | | | | | | | | | | | | |
| 3 | 21 | 62 | 300 | 0 | 110 | 20 | 0 | 70 | 0 | 20 | 50 | 90 | 50 | | | | | | | | | | | | | | | | | | | | |
| 3 | 28 | 62 | 16400 | 0 | 0 | 110 | 0 | 390 | 0 | 8570 | 7350 | 160 | 410 | 71 | 6 | 88 | 5 | 87 | 4 | 68 | 4 | 69 | 3 | 84 | 2 | 92 | 2 | 55 | 2 | 82 | 1 | 85 | 1 |
| 4 | 18 | 62 | 8700 | 1770 | 250 | 250 | 0 | 1500 | 320 | 4090 | 460 | 1060 | 740 | 68 | 5 | 2 | 4 | 51 | 4 | 17 | 1 | 61 | 1 | 88 | 1 | | | | | | | | |
| 5 | 2 | 62 | 54400 | 670 | 2530 | 20170 | * | 930 | 680 | 20970 | 7170 | 8900 | 1650 | 71 | 7 | 38 | 7 | 92 | 6 | 24 | 5 | 68 | 5 | 25 | 5 | 17 | 5 | 50 | 4 | 34 | 3 | 59 | 3 |
| 5 | 23 | 62 | 18100 | 0 | 0 | 11480 | 0 | 130 | 0 | 2620 | 3880 | 1350 | 1560 | 38 | 6 | 24 | 5 | 71 | 4 | 92 | 4 | 88 | 3 | 68 | 1 | 80 | 1 | 91 | 1 | | | | |
| 6 | 6 | 62 | 5500 | 0 | 0 | 700 | 0 | 40 | 0 | 2660 | 2110 | 1010 | 1220 | 71 | 4 | 92 | 3 | 68 | 3 | 88 | 2 | 38 | 2 | | | | | | | | | | |
| 6 | 20 | 62 | 17700 | 2070 | 0 | 5050 | 120 | 3770 | 290 | 3970 | 2440 | 1410 | 460 | 51 | 5 | 25 | 4 | 92 | 4 | 24 | 4 | 3 | 4 | 38 | 3 | 2 | 3 | 88 | 2 | 62 | 1 | 44 | 1 |
| 7 | 3 | 62 | 16400 | 870 | 290 | 6920 | 80 | 1490 | 80 | 4600 | 2030 | 1700 | 750 | 68 | 5 | 25 | 4 | 38 | 4 | 51 | 4 | 3 | 3 | 24 | 3 | 30 | 2 | 35 | 2 | 45 | 2 | 44 | 2 |
| 7 | 11 | 62 | 7100 | 160 | 40 | 2690 | 0 | 620 | 40 | 1990 | 1570 | 1040 | 620 | 68 | 3 | 25 | 3 | 88 | 3 | 51 | 2 | 71 | 2 | 30 | 2 | 92 | 2 | 24 | 2 | 38 | 2 | 69 | 1 |
| 8 | 1 | 62 | 6100 | 120 | 80 | 1700 | 0 | 350 | 40 | 2150 | 1700 | 210 | 330 | 68 | 4 | 25 | 3 | 69 | 3 | 38 | 2 | 88 | 2 | 92 | 2 | 51 | 1 | 71 | 1 | 24 | 1 | 79 | 1 |
| 8 | 15 | 62 | 59700 | 1270 | 1650 | 3670 | 420 | 80 | 40 | 43150 | 9390 | 6960 | 2430 | 68 | 8 | 71 | 6 | 88 | 5 | 87 | 4 | 92 | 3 | 69 | 3 | 12 | 3 | 44 | 3 | 2 | 3 | 38 | 3 |
| 9 | 5 | 62 | 22900 | 630 | 360 | 9910 | 0 | 290 | 0 | 7020 | 4680 | 6750 | 2250 | 68 | 6 | 24 | 6 | 88 | 4 | 38 | 4 | 27 | 4 | 25 | 3 | 3 | 2 | 71 | 2 | 15 | 2 | 26 | 1 |
| 9 | 17 | 62 | 135800 | 6830 | 3480 | 65410 | 170 | 580 | 80 | 52790 | 6420 | 12830 | 1450 | 68 | 9 | 38 | 8 | 24 | 8 | 71 | 6 | 25 | 6 | 88 | 5 | 10 | 5 | 12 | 4 | 1 | 4 | 69 | 4 |
| *5 | 2 | 62 | | | | | 1270 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 4 | 61 | 82 | 32 | 26 | 31 | 58 | 10 | 56 | 6 | 21 | 1740 | 10 | 66 | 22 | 4 | 15 | 1 | 11 | 1 | | | | | 0 | | | | | | | 37 | 1 |
| 10 | 18 | 61 | 26 | 32 | 82 | 29 | 56 | 9. | 70 | 7 | 23 | 3100 | 0 | 68 | 1 | 4 | 20 | 1 | | | | | | | 0 | | | | | | | 12 | 0 |
| 11 | 8 | 61 | 82 | 86 | 26 | 3 | | 1 | | 1 | 9 | 850 | 10 | 286 | 22 | 6 | 15 | 2 | 2 | 1 | | | | | 0 | | | | | | | 37 | 0 |
| 11 | 20 | 61 | 82 | 89 | 26 | 3 | | 1 | | 1 | 6 | 160 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 10 | 0 |
| 12 | 6 | 61 | 82 | 69 | 26 | 7 | 70 | 4 | 92 | 2 | 18 | 20 | 10 | 42 | 22 | 3 | 15 | 1 | | | | | | | 0 | | | | | | | 18 | 0 |
| 12 | 20 | 61 | 82 | 61 | 26 | 13 | 92 | 6 | 71 | 4 | 16 | 410 | 20 | 25 | 22 | 3 | | | | | | | | | 1 | | | | | | | 16 | 0 |
| 1 | 2 | 62 | 82 | 58 | 26 | 12 | 92 | 10 | 71 | 3 | 17 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 17 | 62 | 82 | 63 | 26 | 14 | 70 | 5 | 71 | 3 | 15 | 7180 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 15 | 0 |
| 2 | 7 | 62 | 82 | 37 | 26 | 10 | 71 | 8 | 70 | 6 | 39 | 560 | 10 | 1 | | | | | | | | | | | 0 | | | | | | | 69 | 0 |
| 2 | 22 | 62 | | | | | | | | | | 1380 | 10 | 1 | | | | | | | | | | | 0 | | | | | | | 69 | 0 |
| 3 | 7 | 62 | 82 | 38 | 26 | 15 | 71 | 7 | 70 | 4 | 36 | 250 | 30 | 3 | | | | | | | | | | | 0 | | | | | | | 330 | 0 |
| 3 | 21 | 62 | 82 | 30 | 26 | 17 | 71 | 5 | 72 | 4 | 44 | 650 | 10 | 0 | | | | | | | | | | | 0 | | | | | | | 180 | 0 |
| 3 | 28 | 62 | | | | | | | | | | 230 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 18 | 62 | 26 | 20 | 71 | 14 | 92 | 10 | 69 | 5 | 51 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 2 | 62 | 82 | 49 | 92 | 38 | 26 | 8 | 70 | 2 | 3 | 40 | 0 | 5 | | | | | | | | | | | 1 | | | | | | | 2 | 0 |
| 5 | 23 | 62 | 82 | 28 | 92 | 20 | 83 | 15 | 26 | 5 | 32 | 0 | 10 | 24 | 15 | 1 | 2 | 1 | | | | | | | 12 | 50 | 2 | | | | | 0 | 0 |
| 6 | 6 | 62 | 92 | 31 | 83 | 17 | 71 | 15 | 26 | 10 | 27 | 0 | 0 | 3 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 6 | 20 | 62 | 92 | 52 | 71 | 10 | 26 | 6 | 80 | 4 | 72 | 0 | 0 | 7 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 7 | 3 | 62 | 26 | 29 | 92 | 10 | 71 | 8 | 21 | 5 | 48 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 11 | 62 | 58 | 23 | 26 | 19 | 92 | 11 | 82 | 8 | 39 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 1 | 62 | 58 | 51 | 26 | 26 | 82 | 5 | 92 | 3 | 15 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 15 | 62 | 26 | 43 | 58 | 15 | 82 | 8 | 70 | 2 | 32 | 40 | 0 | 128 | 2 | 5 | 11 | 3 | 22 | 1 | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 5 | 62 | 26 | 58 | 58 | 28 | 82 | 4 | 71 | 2 | 8 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 26 | 57 | 58 | 18 | 82 | 12 | 27 | 4 | 9 | 0 | 0 | 71 | 2 | 4 | 15 | 2 | 11 | 1 | 18 | 1 | | | 0 | | | | | | | 9 | 0 |

**MINOR BASIN** BIG SIOUX RIVER

**STATION LOCATION** BIG SIOUX RIVER BELOW

SIOUX FALLS, SOUTH DAKOTA 80

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 4 | 61 | 13.3 | .0 | 7.3 | 25.0 | 216 | - | - | 5.6 | 213 | 264 | 388 | 20 | 35 | 223 | 13.2 | 1027 | 9700M |
| 10 | 11 | 61 | 13.9 | 1.4 | 7.6 | 46.0 | 116 | - | - | .6 | 81 | 196 | 310 | 30 | 39 | 190 | .7 | 636 | 1200M |
| 10 | 18 | 61 | 10.3 | .0 | 7.4 | 94.0 | 224 | - | - | 12.8 | 210 | 258 | 300 | 45 | 13 | 226 | 12.8 | 1000 | 3300M |
| 10 | 25 | 61 | 9.5 | .0 | 7.4 | .0 | 192 | - | - | 12.0 | 219 | 273 | 446 | 40 | 35 | 235 | 15.6 | 1023 | 13000M |
| 11 | 1 | 61 | 1.1 | .0 | 7.2 | 100.0 | 164 | - | - | .8 | 161 | 233 | 332 | 40 | 23 | 198 | 12.4 | 875 | 17000M |
| 11 | 8 | 61 | .3 | 4.9 | 7.5 | 100.0 | 208 | - | - | .8 | 129 | 263 | 426 | 20 | 18 | 233 | 8.6 | 894 | 11000M |
| 11 | 15 | 61 | .5 | 4.7 | 7.6 | 10.0 | 144 | - | - | 1.2 | 125 | 259 | 416 | 25 | 23 | 235 | 8.4 | 851 | 15000M |
| 11 | 22 | 61 | .9 | 5.0 | 7.7 | 72.0 | 116 | - | - | 2.0 | 143 | 238 | 418 | 40 | 17 | 222 | 7.4 | 813 | 4700M |
| 11 | 29 | 61 | .5 | 5.3 | 7.7 | 92.0 | 104 | - | - | .6 | 125 | 245 | 422 | 40 | 21 | 233 | 6.6 | 752 | 12000M |
| 12 | 6 | 61 | 4.3 | 4.7 | 7.8 | 122.0 | 132 | - | - | .2 | 155 | 240 | 400 | 40 | 3 | 229 | 9.4 | 877 | 33000M |
| 12 | 13 | 61 | .6 | 4.8 | 7.6 | 118.0 | 232 | - | - | 5.2 | 227 | 265 | 268 | 40 | 24 | 266 | 13.6 | 1116 | 2000M |
| 12 | 20 | 61 | .3 | 5.1 | 7.6 | 120.0 | 204 | - | - | .8 | 270 | 280 | 426 | 40 | - | 270 | 12.6 | 1192 | 13000M |
| 12 | 27 | 61 | 1.1 | 1.9 | 7.4 | 240.0 | 180 | - | - | 5.4 | 247 | 293 | 460 | 40 | 13 | 282 | 19.1 | 1156 | |
| 1 | 3 | 62 | .5 | .4 | 7.4 | 125.0 | 244 | - | - | 6.0 | 254 | 312 | 480 | 40 | 15 | 300 | 22.0 | 1216 | 11000M |
| 1 | 10 | 62 | .0 | .2 | 7.6 | 240.0 | 424 | - | - | 16.8 | 321 | 316 | 482 | 40 | 35 | 307 | 34.0 | 1338 | |
| 1 | 17 | 62 | .5 | .5 | 7.4 | 380.0 | 472 | - | - | 15.6 | 348 | 340 | 482 | 30 | 15 | 273 | 32.0 | 1572 | 51000M |
| 1 | 24 | 62 | .5 | .0 | 7.2 | 360.0 | 876 | - | - | 20.6 | 280 | 342 | 446 | 40 | 22 | 294 | 30.0 | 1636 | 33000M |
| 1 | 31 | 62 | 1.4 | .4 | 7.4 | 300.0 | 456 | - | - | 21.0 | 430 | 347 | 428 | 30 | 22 | 288 | 18.4 | 1564 | 120000M |
| 2 | 7 | 62 | 1.5 | 4.8 | 7.3 | 170.0 | 300 | - | - | 1.8 | 187 | 238 | 346 | 30 | 29 | 216 | 11.6 | 936 | 120000M |
| 2 | 14 | 62 | 3.5 | 7.1 | 7.5 | 84.0 | 152 | - | - | .8 | 111 | 215 | 330 | 40 | 18 | 188 | 7.5 | 732 | 95000M |
| 2 | 21 | 62 | 2.2 | 7.0 | 7.5 | 270.0 | 224 | - | - | .8 | 110 | 186 | 272 | 100 | 20 | 131 | 6.4 | 578 | 33000M |
| 2 | 28 | 62 | 1.0 | 5.3 | 7.5 | 138.0 | 256 | - | .1 | 5.6 | 247 | 231 | 320 | 90 | 18 | 169 | 11.6 | 948 | 850M |
| 3 | 7 | 62 | 2.5 | 1.8 | 7.3 | 130.0 | 244 | - | - | 3.6 | 242 | 256 | 376 | 50 | 20 | 220 | 10.8 | 556 | 4600M |
| 3 | 14 | 62 | .5 | 2.4 | 7.4 | 205.0 | 264 | - | - | 2.0 | 273 | 281 | 380 | 45 | 18 | 290 | 12.6 | 1076 | 110M |
| 3 | 21 | 62 | 4.5 | 2.1 | 7.3 | 215.0 | 220 | - | - | 1.2 | 215 | 256 | 374 | 30 | 16 | 201 | 8.4 | 954 | 1300M |
| 3 | 28 | 62 | 1.5 | 7.4 | 7.8 | 48.0 | 148 | - | - | 1.6 | 15 | 72 | 86 | 45 | 650 | 27 | .1 | 147 | *100M |
| 4 | 4 | 62 | 2.5 | 11.4 | 7.2 | 14.0 | 56 | - | - | .6 | 5 | 152 | 118 | 40 | 275 | 109 | 1.0 | 191 | *100M |
| 4 | 11 | 62 | 3.5 | 11.2 | 7.7 | 7.0 | 80 | - | - | 1.6 | 8 | 132 | 170 | 40 | 190 | 31 | .8 | 210 | *10M |
| 4 | 18 | 62 | 8.0 | 10.9 | 7.7 | 6.0 | 40 | - | - | .4 | 17 | 161 | 300 | 30 | 90 | 128 | .1 | 382 | 30M |
| 4 | 25 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 120M |
| 5 | 2 | 62 | 14.0 | 8.4 | 8.0 | 5.6 | 56 | - | - | .4 | 31 | 214 | 356 | 25 | 45 | 169 | .1 | 633 | 3400M |
| 5 | 9 | 62 | 14.6 | 7.3 | 8.1 | 2.0 | 56 | - | - | .6 | 41 | 246 | 426 | 10 | 64 | 214 | .1 | 662 | *100M |
| 5 | 16 | 62 | 20.8 | 7.0 | 7.8 | 4.4 | 48 | - | - | .4 | 40 | 219 | 360 | 40 | 120 | 228 | .1 | 556 | *100M |
| 5 | 23 | 62 | 16.8 | 8.2 | 7.8 | 3.2 | 88 | - | - | .4 | 22 | 174 | 274 | 25 | 350 | 118 | .1 | 469 | 1100M |
| 5 | 31 | 62 | 15.8 | 8.8 | 7.8 | 5.6 | 16 | - | - | .4 | 8 | 190 | 290 | 25 | 210 | 114 | .0 | 501 | - |
| 6 | 6 | 62 | 17.0 | 8.0 | 8.2 | 1.6 | 9 | - | - | 2.6 | 21 | 231 | 330 | 25 | 150 | 129 | .0 | 478 | *100M |
| 6 | 13 | 62 | 21.0 | 7.6 | 7.6 | 3.2 | 9 | - | - | 2.2 | 15 | 223 | 332 | 35 | 140 | 124 | .8 | 435 | *10M |
| 6 | 20 | 62 | 21.6 | 7.4 | 7.6 | - | 10 | - | - | 5.5 | 6 | 228 | 318 | 35 | 100 | 330 | .9 | 511 | *10M |
| 6 | 27 | 62 | 23.1 | 7.1 | 8.7 | 2.4 | 10 | - | - | 2.0 | 6 | 257 | 330 | 25 | 110 | 246 | 1.3 | 494 | 40M |

NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** SOUTH DAKOTA

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** BIG SIOUX RIVER

**STATION LOCATION** BIG SIOUX RIVER BELOW
SIOUX FALLS, SOUTH DAKOTA 80

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 2 | 62 | 24.5 | 6.6 | 7.8 | 7.2 | 8 | - | - | 2.8 | 5 | 245 | 340 | 20 | 110 | 306 | .8 | 500 | - |
| 7 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 300M |
| 7 | 11 | 62 | 24.5 | 7.3 | 7.9 | 2.0 | 4 | - | - | 4.2 | 4 | 195 | 320 | 25 | 155 | 270 | 1.0 | 460 | 480M |
| 7 | 18 | 62 | 21.6 | 7.5 | 8.3 | 7.2 | - | - | - | 3.0 | 36 | 231 | 328 | 35 | 130 | 303 | .8 | 588 | 220M |
| 7 | 25 | 62 | 23.2 | 7.3 | 8.1 | 7.2 | 34 | - | - | 1.4 | 21 | 250 | 344 | 35 | 130 | 300 | .8 | 504 | 450M |
| 8 | 1 | 62 | 21.6 | 7.3 | 8.2 | 2.8 | 66 | - | - | 2.0 | 21 | 246 | 376 | 25 | 155 | 451 | .6 | 610 | 4800M |
| 8 | 8 | 62 | 25.5 | 6.4 | 8.3 | 10.8 | 60 | - | - | 4.2 | 24 | 260 | 394 | 20 | 135 | - | .9 | 629 | 480M |
| 8 | 15 | 62 | 22.6 | 6.8 | 8.5 | 6.0 | 65 | - | - | 4.0 | 33 | 260 | 410 | 20 | 100 | - | 1.2 | 647 | 2300M |
| 8 | 22 | 62 | 24.1 | 6.8 | 8.5 | 3.5 | 73 | - | - | 6.4 | 37 | 252 | 406 | 20 | 97 | 221 | 1.4 | 646 | 1600M |
| 8 | 29 | 62 | 21.4 | 6.6 | 8.5 | 5.2 | 80 | - | - | 4.4 | 41 | 256 | 448 | 20 | 150 | 220 | .7 | 638 | *20M |
| 9 | 5 | 62 | 20.4 | 7.4 | 8.3 | 3.2 | 64 | - | - | 2.4 | 38 | 250 | 392 | 20 | 100 | 201 | .8 | 691 | 200M |
| 9 | 12 | 62 | 12.5 | 6.8 | 8.4 | 5.6 | 71 | - | - | 1.2 | 39 | 243 | 390 | 25 | 100 | 197 | 1.0 | 66* | *20M |
| 9 | 19 | 62 | 16.0 | 7.1 | 8.3 | 5.6 | 59 | - | - | 2.2 | 42 | 249 | 400 | 20 | 100 | 209 | .8 | 777 | 110M |
| 9 | 26 | 62 | 15.3 | 6.2 | 8.2 | 11.2 | 56 | - | - | 1.1 | 49 | 257 | 412 | 20 | 150 | 208 | .8 | 671 | 250M |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Brandon, South Dakota
Operated by U.S. Geological Survey

MAJOR BASIN Missouri River

MINOR BASIN Big Sioux River

STATION LOCATION Big Sioux River below
Sioux Falls, South Dakota

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .039 | .039 | .050 | .025 | .035 | .025 | 13.000 | .610 | 1.580 | .868 | 1.100 | .378 |
| 2 | .039 | .095 | .044 | .025 | .055 | .020 | 10.800 | .593 | 1.490 | .880 | 1.040 | .360 |
| 3 | .039 | .065 | .076 | .030 | .070 | .020 | 9.530 | .593 | 1.440 | .992 | 1.000 | .399 |
| 4 | .038 | .059 | .066 | .030 | .060 | .020 | 7.870 | .576 | 1.420 | 1.090 | .972 | .372 |
| 5 | .033 | .046 | .044 | .030 | .075 | .015 | 6.250 | .540 | 1.500 | 1.700 | .940 | .360 |
| 6 | .034 | .046 | .051 | .030 | .055 | .020 | 5.190 | .502 | 1.520 | 1.940 | .904 | .345 |
| 7 | .031 | .055 | .039 | .030 | .030 | .030 | 4.320 | .486 | 1.620 | 1.790 | .848 | .324 |
| 8 | .027 | .051 | .047 | .030 | .025 | .035 | 3.740 | .474 | 2.090 | 1.860 | .836 | .383 |
| 9 | .028 | .052 | .051 | .025 | .020 | .030 | 3.320 | .453 | 2.160 | 2.070 | .816 | .375 |
| 10 | .057 | .052 | .040 | .020 | .015 | .025 | 2.990 | .405 | 1.890 | 2.420 | .812 | .351 |
| 11 | .079 | .049 | .045 | .020 | .010 | .025 | 2.580 | .456 | 1.800 | 2.460 | .764 | .330 |
| 12 | .041 | .047 | .045 | .025 | .030 | .025 | 2.160 | .444 | 1.740 | 2.690 | .730 | .315 |
| 13 | .038 | .049 | .045 | .025 | .025 | .025 | 1.870 | .625 | 1.700 | 2.540 | .719 | .291 |
| 14 | .038 | .049 | .040 | .025 | .020 | .025 | 1.730 | .784 | 1.660 | 2.270 | .698 | .276 |
| 15 | .036 | .054 | .040 | .020 | .085 | .020 | 1.620 | .712 | 1.600 | 2.140 | .670 | .261 |
| 16 | .038 | .055 | .040 | .015 | .105 | .020 | 1.580 | .565 | 1.580 | 2.210 | .635 | .252 |
| 17 | .041 | .052 | .035 | .015 | .255 | .025 | 1.480 | .512 | 2.000 | 2.080 | .600 | .234 |
| 18 | .041 | .055 | .035 | .015 | .440 | .030 | 1.570 | .530 | 2.140 | 1.940 | .558 | .219 |
| 19 | .036 | .040 | .035 | .015 | .430 | .035 | 1.400 | .520 | 1.860 | 1.960 | .523 | .210 |
| 20 | .039 | .044 | .035 | .015 | .435 | .033 | 1.250 | .593 | 1.570 | 2.140 | .498 | .202 |
| 21 | .036 | .051 | .035 | .015 | .330 | .039 | 1.130 | .688 | 1.430 | 2.390 | .474 | .196 |
| 22 | .033 | .054 | .030 | .015 | .250 | .047 | 1.020 | 1.540 | 1.320 | 2.200 | .450 | .188 |
| 23 | .032 | .045 | .030 | .020 | .160 | .051 | .944 | 1.300 | 1.210 | 2.040 | .435 | .180 |
| 24 | .038 | .045 | .025 | .020 | .090 | .058 | .876 | 1.400 | 1.130 | 1.940 | .411 | .180 |
| 25 | .039 | .047 | .025 | .025 | .070 | .066 | .812 | 1.640 | 1.080 | 1.900 | .393 | .174 |
| 26 | .033 | .046 | .025 | .020 | .020 | .164 | .740 | 1.400 | 1.030 | 1.880 | .378 | .167 |
| 27 | .033 | .042 | .025 | .015 | .040 | .657 | .716 | 1.270 | .960 | 1.820 | .366 | .162 |
| 28 | .037 | .045 | .020 | .015 | .030 | 3.640 | .666 | 1.500 | .900 | 1.580 | .363 | .155 |
| 29 | .105 | .051 | .020 | .020 |  | 8.370 | .635 | 1.650 | .848 | 1.390 | .354 | .172 |
| 30 | .044 | .051 | .020 | .030 |  | 9.940 | .624 | 1.610 | .800 | 1.270 | .484 | .205 |
| 31 | .039 |  | .025 | .030 |  | 15.500 |  | 1.600 |  | 1.170 | .399 |  |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 11 | - | - | - | - | - | - | 0 | 4 | 5 | 4 | 5 | 6 | | | | | | |
| 10 | 16 | 61 | 10 | 25 | - | - | - | - | - | - | 2 | 5 | 1 | 5 | 3 | 7 | | | | | | |
| 10 | 23 | 61 | 11 | 1 | - | - | - | - | - | - | 0 | 5 | 0 | 5 | 0 | 7 | | | | | | |
| 10 | 30 | 61 | 11 | 7 | - | - | - | - | - | - | 0 | 5 | 5 | 5 | 5 | 7 | | | | | | |
| 11 | 6 | 61 | 11 | 16 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 4 | 3 | 4 | 6 | 6 | | | | | | |
| 11 | 13 | 61 | 11 | 22 | - | - | - | - | - | - | 0 | 5 | 1 | 5 | 1 | 7 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | - | - | - | - | - | - | 0 | 5 | 11 | 6 | 11 | 8 | | | | | | |
| 11 | 27 | 61 | 12 | 6 | - | - | - | - | - | - | 8 | 5 | 11 | 5 | 19 | 7 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | 0 | 0 | 0 | 1 | 0 | 1 | 12 | 6 | 9 | 5 | 21 | 8 | | | | | | |
| 12 | 11 | 61 | 12 | 21 | - | - | - | - | - | - | 16 | 6 | 9 | 6 | 25 | 8 | | | | | | |
| 12 | 18 | 61 | 12 | 28 | - | - | - | - | - | - | 16 | 6 | 15 | 5 | 31 | 8 | | | | | | |
| 12 | 26 | 61 | 1 | 3 | - | - | - | - | - | - | 18 | 7 | 22 | 5 | 40 | 9 | | | | | | |
| 1 | 2 | 62 | 1 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 13 | 6 | 13 | 5 | 26 | 8 | | | | | | |
| 1 | 8 | 62 | 1 | 30 | - | - | - | - | - | - | 42 | 6 | 50 | 10 | 92 | 12 | | | | | | |
| 1 | 15 | 62 | 1 | 24 | - | - | - | - | - | - | 31 | 5 | 21 | 4 | 52 | 7 | | | | | | |
| 1 | 22 | 62 | 1 | 31 | - | - | - | - | - | - | 61 | 7 | 26 | 6 | 87 | 9 | | | | | | |
| 1 | 29 | 62 | 2 | 7 | - | - | - | - | - | - | 45 | 12 | 2 | 10 | 47 | 16 | | | | | | |
| 2 | 6 | 62 | 2 | 23 | 1 | 1 | 1 | 1 | 2 | 1 | 33 | 5 | 20 | 4 | 53 | 6 | | | | | | |
| 2 | 12 | 62 | 2 | 23 | - | - | - | - | - | - | 16 | 5 | 12 | 5 | 28 | 7 | | | | | | |
| 2 | 19 | 62 | 3 | 2 | - | - | - | - | - | - | 21 | 4 | 17 | 4 | 38 | 6 | | | | | | |
| 2 | 26 | 62 | 3 | 12 | - | - | - | - | - | - | 68 | 13 | 15 | 5 | 83 | 14 | | | | | | |
| 3 | 5 | 62 | 3 | 16 | 0 | 1 | 0 | 1 | 0 | 1 | 32 | 6 | 13 | 5 | 45 | 7 | | | | | | |
| 3 | 12 | 62 | 4 | 3 | - | - | - | - | - | - | 85 | 8 | 37 | 6 | 122 | 10 | | | | | | |
| 3 | 19 | 62 | 3 | 30 | - | - | - | - | - | - | 60 | 8 | 23 | 6 | 83 | 10 | | | | | | |
| 3 | 26 | 62 | 4 | 4 | - | - | - | - | - | - | 47 | 7 | 23 | 5 | 70 | 9 | | | | | | |
| 5 | 11 | 62 | 7 | 25 | - | - | - | - | - | - | 1 | 5 | 11 | 6 | 12 | 8 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | - | - | - | - | - | - | 0 | 8 | 11 | 6 | 11 | 10 | | | | | | |
| 5 | 28 | 62 | 6 | 29 | - | - | - | - | - | - | 0 | 4 | 6 | 3 | 6 | 5 | | | | | | |
| 6 | 4 | 62 | 7 | 3 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 5 | 6 | 5 | 7 | 7 | | | | | | |
| 6 | 11 | 62 | 7 | 10 | - | - | - | - | - | - | 5 | 5 | 8 | 5 | 13 | 7 | | | | | | |
| 6 | 25 | 62 | 7 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 3 | 8 | 3 | 12 | 4 | | | | | | |
| 7 | 2 | 62 | 7 | 27 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 6 | 5 | 6 | 6 | 8 | | | | | | |
| 8 | 13 | 62 | 10 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 5 | 19 | 5 | 23 | 7 | | | | | | |
| 8 | 20 | 62 | 10 | 13 | - | - | - | - | - | - | 5 | 5 | 9 | 5 | 14 | 7 | | | | | | |
| 8 | 27 | 62 | 9 | 27 | - | - | - | - | - | - | 0 | 7 | 7 | 5 | 7 | 9 | | | | | | |
| 9 | 4 | 62 | 9 | 19 | 0 | 0 | 0 | 1 | 0 | 1 | 10 | 6 | 8 | 7 | 18 | 9 | | | | | | |
| 9 | 10 | 62 | 10 | 4 | - | - | - | - | - | - | 13 | 6 | 13 | 7 | 26 | 9 | | | | | | |
| 9 | 17 | 62 | 10 | 10 | - | - | - | - | - | - | 8 | 6 | 8 | 6 | 16 | 8 | | | | | | |
| 9 | 24 | 62 | 10 | 16 | - | - | - | - | - | - | 4 | 5 | 6 | 5 | 10 | 7 | | | | | | |

**STATION LOCATION** CHATTAHOOCHEE RIVER AT

COLUMBUS, GEORGIA

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE - GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10 |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS |
| 10 | 2 | 61 | 3300 | 0 | 440 | 440 | 0 | 150 | 20 | 1550 | 730 | 850 | 250 | 68 | 3 | 87 | 3 | 71 | 2 | 17 | 2 | 38 | 1 | | | | | | | | | |
| 10 | 16 | 61 | 5500 | 100 | 210 | 390 | 0 | 370 | 60 | 3480 | 910 | 950 | 150 | 68 | 4 | 69 | 4 | 71 | 2 | 88 | 2 | 51 | 1 | 17 | 1 | | | | | | | |
| 11 | 6 | 61 | 4400 | 190 | 20 | 480 | 0 | 210 | 0 | 3350 | 190 | 580 | 20 | 68 | 5 | 69 | 2 | 2 | 1 | | | | | | | | | | | | | |
| 11 | 20 | 61 | 1400 | 0 | 40 | 230 | 0 | 40 | 0 | 970 | 80 | 660 | 20 | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 900 | 0 | 0 | 290 | 0 | 60 | 40 | 480 | 40 | 520 | 20 | 68 | 1 | 69 | 1 | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 100 | 0 | 0 | 20 | 0 | 0 | 0 | 40 | 60 | 80 | 40 | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 100 | 0 | 0 | 0 | 0 | 40 | 0 | 60 | 40 | 20 | 20 | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 100 | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 40 | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 200 | 0 | 20 | 50 | 0 | 0 | 70 | 0 | 90 | 20 | 0 | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 600 | 0 | 0 | 50 | 0 | 180 | 0 | 290 | 110 | 90 | 70 | 69 | 1 | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 200 | 0 | 0 | 20 | 0 | 0 | 0 | 110 | 90 | 90 | 180 | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 1100 | 0 | 0 | 60 | 0 | 150 | 660 | 150 | 40 | 100 | 40 | 62 | 3 | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 800 | 20 | 0 | 230 | 0 | 120 | 40 | 210 | 150 | 60 | 0 | 25 | 1 | 69 | 1 | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 300 | 0 | 0 | 20 | 0 | 50 | 20 | 160 | 50 | 110 | 250 | 69 | 1 | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 6000 | 80 | 0 | 130 | 90 | 0 | 1160 | 4030 | 490 | 550 | 270 | 71 | 5 | 62 | 3 | 69 | 3 | | | | | | | | | | | | | |
| 5 | 21 | 62 | 5300 | 570 | 190 | 780 | 80 | 40 | 0 | 1880 | 1730 | 1140 | 460 | 88 | 3 | 71 | 3 | 92 | 3 | 68 | 2 | 69 | 2 | 2 | 2 | 38 | 1 | 17 | 1 | | | |
| 6 | 4 | 62 | 4500 | 150 | 150 | 970 | 0 | 390 | 20 | 950 | 1860 | 40 | 120 | 88 | 3 | 68 | 2 | 92 | 2 | 24 | 2 | 69 | 1 | 51 | 1 | 38 | 1 | 25 | 1 | | | |
| 6 | 18 | 62 | 2600 | 40 | 0 | 460 | 0 | 80 | 80 | 1140 | 760 | 380 | 550 | 68 | 2 | 92 | 2 | 69 | 2 | 38 | 1 | | | | | | | | | | | |
| 7 | 2 | 62 | 1700 | 130 | 80 | 110 | 0 | 80 | 0 | 460 | 840 | 460 | 170 | 92 | 3 | 68 | 1 | 71 | 1 | | | | | | | | | | | | | |
| 7 | 16 | 62 | 700 | 40 | 40 | 150 | 0 | 0 | 0 | 250 | 210 | 0 | 0 | 69 | 1 | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 10100 | 290 | 830 | 5380 | 0 | 910 | 170 | 1530 | 1040 | 540 | 210 | 25 | 5 | 68 | 3 | 51 | 3 | 88 | 3 | 14 | 3 | 3 | 1 | 63 | 1 | | | | | |
| 8 | 20 | 62 | 3400 | 40 | 0 | 1550 | 0 | 540 | 250 | 410 | 620 | 540 | 120 | 25 | 3 | 88 | 2 | 51 | 2 | 68 | 2 | 63 | 1 | 32 | 1 | 29 | 1 | | | | | |
| 9 | 4 | 62 | 13400 | 9070 | 130 | 1860 | 0 | 40 | 0 | 1730 | 590 | 1270 | 250 | 4 | 6 | 68 | 4 | 25 | 3 | 88 | 2 | 40 | 2 | 38 | 2 | 69 | 1 | | | | | |
| 9 | 17 | 62 | 1200 | 90 | 0 | 740 | 0 | 50 | 0 | 140 | 230 | 320 | 200 | 25 | 2 | 26 | 1 | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 23 | 51 | 27 | 25 | 70 | 7 | 82 | 4 | 13 | 0 | 30 | 1420 | 47 | 6 | 16 | 6 | 2 | 6 | 22 | 6 | 11 | 6 | 2 | | | | | | | 1 | 1 |
| 10 | 16 | 61 | 23 | 30 | 57 | 27 | 82 | 13 | 27 | 11 | 19 | 0 | 10 | 113 | 11 | 4 | 17 | 2 | | | | | | | 0 | | | | | | | 0 | 1 |
| 11 | 6 | 61 | 27 | 74 | 23 | 13 | 57 | 5 | 82 | 3 | 5 | 0 | 0 | 146 | 17 | 4 | 11 | 3 | 22 | 3 | 16 | 3 | 21 | 2 | 8 | 50 | 2 | | | | | 0 | 0 |
| 11 | 20 | 61 | 23 | 21 | 57 | 18 | 56 | 18 | 82 | 13 | 30 | 0 | 0 | 84 | 11 | 4 | 16 | 1 | | | | | | | 1 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 23 | 29 | 82 | 20 | 57 | 18 | 27 | 9 | 24 | 0 | 10 | 86 | 22 | 3 | 21 | 3 | 11 | 3 | | | | | 1 | | | | | | | 2 | 1 |
| 12 | 18 | 61 | 62 | 18 | 88 | 7 | 71 | 6 | 92 | 6 | 63 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | | | | | | | | | | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 2 |
| 1 | 15 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 57 | 22 | 62 | 6 | 56 | 6 | 58 | 5 | 61 | 0 | 10 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 57 | 25 | 82 | 15 | 70 | 8 | 27 | 5 | 47 | 70 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 62 | 24 | 57 | 17 | 27 | 7 | 92 | 7 | 45 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 57 | 36 | 27 | 8 | 2 | 5 | 92 | 5 | 46 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 57 | 39 | 92 | 11 | 95 | 7 | 9 | 7 | 36 | 0 | 10 | 6 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 4 | 16 | 62 | 57 | 44 | 9 | 9 | 62 | 5 | 92 | 3 | 39 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 82 | 65 | 57 | 26 | 9 | 2 | 67 | 1 | 6 | 40 | 0 | 18 | 11 | 2 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 57 | 31 | 56 | 14 | 82 | 11 | 28 | 9 | 35 | 510 | 0 | 40 | 11 | 2 | 17 | 2 | 22 | 1 | | | | | 13 | 51 | 2 | 50 | 1 | | | 0 | 0 |
| 6 | 4 | 62 | 57 | 25 | 56 | 19 | 71 | 12 | 92 | 7 | 37 | 190 | 20 | 72 | 11 | 3 | 46 | 2 | 17 | 2 | 22 | 1 | | | 21 | 76 | 2 | 51 | 2 | 53 | 1 | 0 | 0 |
| 6 | 18 | 62 | 92 | 45 | 57 | 18 | 56 | 16 | 28 | 6 | 15 | 80 | 10 | 44 | 22 | 3 | 46 | 1 | | | | | | | 14 | 73 | 2 | 50 | 2 | | | 0 | 2 |
| 7 | 2 | 62 | 92 | 77 | 56 | 7 | 57 | 5 | 82 | 2 | 9 | 0 | 20 | 218 | 17 | 5 | 22 | 4 | 11 | 3 | 18 | 3 | 16 | 2 | 46 | 73 | 3 | 50 | 2 | 76 | 2 | 0 | 0 |
| 7 | 16 | 62 | 57 | 27 | 27 | 24 | 56 | 10 | 70 | 7 | 32 | 0 | 60 | 20 | 11 | 1 | | | | | | | | | 9 | 50 | 1 | | | | | 0 | 0 |
| 8 | 6 | 62 | 27 | 86 | 45 | 2 | 23 | 2 | 57 | 1 | 9 | 0 | 10 | 521 | 22 | 7 | 17 | 4 | 18 | 2 | 16 | 1 | 46 | 1 | 6 | 53 | 1 | | | | | 0 | 0 |
| 8 | 20 | 62 | 27 | 55 | 70 | 20 | 23 | 10 | 57 | 3 | 12 | 0 | 0 | 2980 | 22 | 9 | 18 | 6 | 17 | 6 | 46 | 5 | 7 | 5 | 3 | 50 | 1 | | | | | 0 | 0 |
| 9 | 4 | 62 | 27 | 39 | 23 | 33 | 57 | 14 | 70 | 6 | 8 | 0 | 0 | 718 | 22 | 7 | 17 | 5 | 18 | 5 | 11 | 4 | 16 | 3 | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 27 | 56 | 23 | 32 | 59 | 5 | 26 | 1 | 6 | 0 | 10 | 1970 | 22 | 8 | 17 | 7 | 18 | 6 | 11 | 5 | 21 | 4 | 0 | | | | | | | 0 | 0 |

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**MINOR BASIN** CHATTAHOOCHEE RIVER

**STATION LOCATION** CHATTAHOOCHEE RIVER AT
COLUMBUS, GEORGIA

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 11 | 6 | 61 | 11 | 17 | 3645 | 281 | 99 | 182 | 7 | 26 | 20 | 1 | 1 | 15 | 3 | 9 | 12 | 1 | 24 |
| 12 | 8 | 61 | 12 | 18 | 2612 | 431 | 176 | 255 | 5 | 60 | 41 | 5 | 2 | 32 | 2 | 7 | 32 | 2 | 29 |
| 3 | 5 | 62 | 3 | 14 | 3868 | 266 | 76 | 190 | 2 | 20 | 18 | 1 | 1 | 16 | 0 | 9 | 7 | 2 | 18 |
| 4 | 2 | 62 | 4 | 10 | 3685 | 153 | 56 | 97 | 2 | 16 | 16 | 4 | 1 | 10 | 1 | 5 | 5 | 1 | 11 |
| 5 | 7 | 62 | 5 | 17 | 4478 | 212 | 113 | 99 | 6 | 28 | 25 | 5 | 2 | 16 | 2 | 11 | 16 | 1 | 26 |
| 6 | 6 | 62 | 6 | 15 | 4160 | 222 | 119 | 103 | 5 | 31 | 31 | 5 | 2 | 23 | 1 | 13 | 18 | 2 | 19 |
| 7 | 9 | 62 | 7 | 19 | 4582 | 171 | 87 | 84 | 3 | 23 | 24 | 3 | 1 | 18 | 2 | 11 | 12 | 1 | 13 |
| 8 | 9 | 62 | 8 | 17 | 3650 | 277 | 158 | 119 | 6 | 41 | 36 | 3 | 2 | 29 | 2 | 19 | 24 | 2 | 30 |
| 9 | 4 | 62 | 9 | 13 | 4135 | 172 | 71 | 101 | 2 | 16 | 21 | 2 | 1 | 17 | 1 | 9 | 8 | 1 | 14 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 25.0 | 8.2 | 7.1 | 1.7 | 22 | 1.9 | 3.2 | - | 4 | 20 | 15 | - | 15 | - | - | - | 40 |
| 10 | 9 | 61 | 23.0 | 8.2 | 7.1 | .7 | 18 | 1.2 | 3.2 | - | 4 | 20 | 15 | - | 12 | - | - | - | 300 |
| 10 | 16 | 61 | 21.0 | 8.0 | 7.1 | .9 | 29 | 1.3 | 3.8 | - | 4 | 21 | 15 | - | 18 | - | - | - | 11 |
| 10 | 23 | 61 | 20.0 | 8.8 | 7.1 | 1.7 | 25 | 1.6 | 3.8 | - | 4 | 21 | 16 | - | 15 | - | - | - | 80 |
| 10 | 30 | 61 | 19.0 | 7.7 | 7.1 | .4 | 20 | 1.9 | 3.9 | - | 4 | 20 | 18 | - | 14 | - | - | - | - |
| 11 | 6 | 61 | 20.0 | 9.0 | 7.1 | .4 | 25 | 1.6 | 3.5 | - | 4 | 21 | 18 | 5 | 14 | 5 | .0 | 39 | 900 |
| 11 | 13 | 61 | 17.5 | 8.1 | 7.1 | 1.4 | 20 | 1.3 | 2.8 | - | 4 | 20 | 18 | 5 | 14 | 6 | .1 | 24 | 20 |
| 11 | 20 | 61 | 16.5 | 7.2 | 7.0 | .8 | 21 | - | - | - | 4 | 20 | 18 | 5 | 12 | 8 | .0 | 60 | *20 |
| 11 | 27 | 61 | 15.0 | 7.8 | 7.1 | .7 | 16 | 1.2 | 2.9 | - | 4 | 21 | 18 | 5 | 15 | 5 | .0 | - | 100 |
| 12 | 4 | 61 | 14.0 | 8.4 | 7.1 | 1.1 | 16 | 1.8 | 3.2 | - | 4 | 20 | 16 | - | 14 | - | - | - | 60 |
| 12 | 11 | 61 | 14.0 | 7.9 | 6.9 | .5 | 26 | 1.6 | 3.1 | - | 4 | 20 | 16 | 5 | 20 | 9 | .1 | 47 | 310 |
| 12 | 18 | 61 | 13.0 | 11.0 | 6.7 | .8 | 29 | 1.9 | 4.9 | - | 4 | 12 | 14 | - | 160 | 5 | .1 | 23 | 4800 |
| 12 | 26 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1600 |
| 1 | 2 | 62 | 8.0 | 11.4 | 6.9 | .5 | 18 | 1.3 | 2.9 | - | 3 | 12 | 14 | 5 | 70 | 12 | .0 | 44 | 1400 |
| 1 | 8 | 62 | 8.5 | 10.9 | 6.9 | .9 | 23 | 1.6 | 3.4 | - | 3 | 12 | 15 | - | 150 | 5 | - | 27 | 2500 |
| 1 | 15 | 62 | 8.0 | 11.5 | 6.9 | .7 | 25 | 1.3 | 3.2 | - | 3 | 15 | 15 | - | 40 | 7 | - | 51 | *20 |
| 1 | 22 | 62 | 7.0 | 13.0 | 6.9 | 1.0 | 23 | 1.9 | 4.2 | - | 4 | 12 | 14 | 10 | 120 | 8 | .5 | - | - |
| 1 | 29 | 62 | 9.0 | 11.0 | 6.9 | .4 | 22 | - | - | - | 4 | 15 | 14 | 10 | 70 | 8 | .5 | - | 1300 |
| 2 | 5 | 62 | 13.0 | 9.7 | 6.9 | .6 | 22 | 1.4 | 4.6 | - | 4 | 15 | 16 | - | 40 | - | - | - | 1500 |
| 2 | 12 | 62 | 11.5 | 9.8 | 7.2 | 1.5 | 22 | 1.8 | 3.5 | - | 3 | 16 | 16 | 5 | 40 | 8 | .0 | - | 450 |
| 2 | 19 | 62 | 12.5 | 9.2 | 7.2 | .8 | 23 | 1.3 | 2.6 | - | 3 | 17 | 16 | 10 | 30 | 10 | .0 | - | 150 |
| 2 | 26 | 62 | 14.5 | 10.4 | 6.9 | .8 | 32 | 2.3 | 5.2 | - | 4 | 13 | 18 | 25 | 160 | 13 | .1 | - | 13000 |
| 3 | 5 | 62 | 12.5 | 9.9 | 7.1 | .7 | 22 | 1.8 | 3.8 | - | 2 | 14 | 34 | - | 110 | - | - | - | 1000 |
| 3 | 12 | 62 | 12.0 | 10.0 | 7.1 | 1.9 | 30 | 1.4 | 4.8 | - | 3 | 12 | 12 | - | 100 | - | - | - | 1200 |
| 3 | 19 | 62 | 12.0 | 10.1 | 7.0 | .3 | 19 | 1.0 | 3.2 | - | 3 | 11 | 14 | - | 122 | - | - | - | 2500 |
| 3 | 26 | 62 | 15.0 | 9.4 | 7.1 | .6 | 17 | .9 | 2.6 | - | 2 | 13 | 17 | - | 38 | - | - | - | 2000 |
| 4 | 2 | 62 | 15.0 | 10.1 | 7.0 | 1.1 | 21 | 1.4 | 3.8 | - | 4 | 13 | 14 | - | 75 | - | - | - | 10000 |
| 4 | 9 | 62 | 15.0 | 10.1 | 7.0 | .7 | 23 | 1.2 | 2.8 | - | 3 | 14 | 14 | - | 50 | - | - | - | 4500 |
| 4 | 16 | 62 | 16.0 | 9.3 | 7.0 | .9 | 19 | 1.8 | 2.3 | - | 1 | 11 | 16 | - | 150 | - | - | - | 3800 |
| 4 | 23 | 62 | 16.0 | 9.6 | 7.1 | .8 | 19 | .8 | 3.6 | - | 2 | 13 | 19 | - | 42 | - | - | - | 790 |
| 4 | 30 | 62 | 19.0 | 8.7 | 7.2 | .7 | 20 | .9 | 2.9 | - | 2 | 13 | 16 | - | 33 | - | - | - | 940 |
| 5 | 7 | 62 | 21.0 | 7.9 | 7.2 | .8 | 18 | 1.4 | 2.8 | - | 3 | 13 | 18 | - | 23 | - | - | - | 160 |
| 5 | 14 | 62 | 22.5 | 7.2 | 7.1 | .6 | 20 | 1.2 | 2.6 | - | 3 | 16 | 14 | - | 20 | - | - | - | 20 |
| 5 | 21 | 62 | 25.0 | 7.4 | 7.2 | .7 | 19 | .9 | 1.9 | - | 3 | 17 | 14 | - | 9 | - | - | - | *100 |
| 5 | 28 | 62 | 26.0 | 7.1 | 7.2 | .7 | 21 | .9 | 3.2 | - | 3 | 16 | 16 | - | 8 | - | - | - | - |
| 6 | 4 | 62 | 26.0 | 5.1 | 7.1 | .7 | 23 | 1.9 | 3.8 | - | 3 | 19 | 14 | 10 | 8 | 10 | .0 | - | 5500 |
| 6 | 11 | 62 | 27.0 | 6.3 | 7.4 | 1.3 | 28 | .8 | 3.8 | - | 3 | 17 | 15 | - | 10 | 19 | .0 | - | 170 |
| 6 | 18 | 62 | 28.0 | 4.2 | 6.9 | 1.8 | 19 | 1.4 | 4.0 | - | 2 | 16 | 16 | - | 18 | - | - | - | 1800 |
| 6 | 25 | 62 | 28.0 | 5.5 | 7.0 | .9 | 26 | 1.0 | 3.6 | - | 4 | 13 | 14 | - | 15 | - | - | - | 60 |

**MINOR BASIN** CHATTAHOOCHEE RIVER

**STATION LOCATION** CHATTAHOOCHEE RIVER AT
COLUMBUS, GEORGIA 59

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 2 | 62 | 27.0 | 5.0 | 6.9 | .2 | 21 | 1.2 | 2.9 | - | 3 | 16 | 14 | 5 | 12 | 6 | .0 | 34 | 100 |
| 7 | 9 | 62 | 28.0 | 5.5 | 7.0 | .4 | 25 | 1.0 | 2.8 | - | 3 | 17 | 15 | - | 18 | - | - | - | 200 |
| 7 | 16 | 62 | 28.0 | 4.0 | 6.8 | .6 | 20 | .6 | 4.4 | - | 3 | 17 | 16 | - | 30 | - | - | - | - |
| 7 | 23 | 62 | 29.0 | 4.9 | 6.8 | .5 | 20 | .9 | 3.7 | - | 3 | 16 | 15 | - | 18 | - | - | - | 20 |
| 7 | 30 | 62 | 29.0 | 5.0 | 6.8 | .6 | 19 | 1.2 | 3.4 | - | 3 | 15 | 15 | - | 8 | - | - | - | 20 |
| 8 | 6 | 62 | 29.5 | 5.7 | 7.1 | 1.3 | 19 | .8 | 4.2 | - | 4 | 20 | 15 | - | 8 | - | - | - | 40 |
| 8 | 13 | 62 | 29.0 | 5.0 | 7.1 | .8 | 25 | .9 | 2.9 | - | 4 | 18 | 15 | 5 | 15 | 8 | .0 | - | *20 |
| 8 | 20 | 62 | 29.2 | 7.0 | 7.4 | 1.0 | 25 | 1.2 | 3.0 | - | 4 | 18 | 14 | - | 8 | - | - | - | 100 |
| 8 | 27 | 62 | 28.0 | 4.6 | 7.0 | .2 | 22 | 1.0 | 3.6 | - | 4 | 18 | 15 | 5 | 8 | 6 | .0 | 55 | 100 |
| 9 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 20 |
| 9 | 4 | 62 | 28.2 | 5.5 | 6.9 | .7 | 23 | 1.8 | 3.6 | - | 4 | 19 | 14 | - | 8 | - | - | - | - |
| 9 | 10 | 62 | 28.0 | 4.7 | 6.9 | .9 | 23 | 1.9 | 2.8 | - | 4 | 19 | 15 | - | 8 | - | - | - | 20 |
| 9 | 17 | 62 | 27.5 | 5.5 | 7.0 | .9 | 27 | .9 | 3.6 | - | 4 | 18 | 15 | - | 5 | - | - | - | *20 |
| 9 | 24 | 62 | 26.0 | 5.9 | 6.9 | .8 | 25 | .9 | 2.8 | - | 4 | 18 | 16 | - | 14 | - | - | - | 40 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Columbus, Georgia
Operated by U.S. Geological Survey

MAJOR BASIN Southeast

MINOR BASIN Chattahoochee River

STATION LOCATION Chattahoochee River at Columbus, Georgia

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.380 | 3.980 | 3.930 | 10.400 | 11.800 | 11.000 | 34.600 | 10.800 | 3.500 | 4.020 | 5.140 | 2.170 |
| 2 | 1.350 | 5.080 | 1.380 | 9.800 | 9.500 | 13.100 | 24.600 | 9.630 | 4.130 | 4.410 | 5.450 | 2.350 |
| 3 | 3.620 | 5.650 | 1.290 | 8.860 | 9.590 | 13.800 | 13.700 | 8.900 | 3.650 | 5.510 | 5.670 | 1.800 |
| 4 | 1.350 | 2.100 | 2.740 | 9.560 | 10.100 | 12.700 | 13.100 | 9.490 | 5.370 | 2.990 | 2.900 | 5.540 |
| 5 | 2.750 | 1.350 | 4.920 | 9.990 | 8.390 | 12.000 | 12.900 | 7.980 | 5.600 | 4.680 | 2.900 | 3.930 |
| 6 | 2.780 | 3.760 | 4.350 | 14.100 | 9.350 | 10.100 | 13.300 | 8.810 | 5.490 | 5.960 | 3.370 | 2.940 |
| 7 | 1.420 | 5.090 | 4.840 | 14.100 | 8.860 | 10.200 | 15.700 | 9.280 | 5.040 | 7.410 | 5.570 | 2.170 |
| 8 | 1.370 | 5.730 | 4.160 | 13.900 | 9.390 | 11.900 | 17.200 | 6.790 | 5.270 | 7.920 | 3.780 | 1.500 |
| 9 | 1.360 | 5.510 | 1.430 | 11.900 | 9.120 | 10.600 | 13.200 | 7.500 | 3.070 | 7.790 | 3.500 | 1.520 |
| 10 | 1.880 | 2.500 | 5.200 | 10.800 | 6.440 | 10.200 | 12.800 | 6.410 | 1.560 | 8.440 | 4.490 | 3.630 |
| 11 | 2.190 | 1.500 | 9.730 | 10.700 | 2.130 | 22.900 | 11.600 | 6.520 | 4.710 | 4.270 | 1.990 | 3.800 |
| 12 | 4.520 | 1.400 | 22.500 | 10.500 | 5.890 | 37.100 | 34.000 | 1.750 | 7.790 | 5.830 | 1.510 | 4.700 |
| 13 | 2.240 | 3.500 | 51.600 | 9.780 | 6.230 | 34.300 | 47.400 | 1.520 | 7.420 | 5.780 | 2.570 | 3.150 |
| 14 | 1.450 | 4.200 | 52.800 | 9.870 | 7.090 | 16.500 | 36.100 | 2.700 | 8.140 | 4.400 | 3.690 | 3.620 |
| 15 | 1.350 | 3.940 | 49.600 | 10.800 | 5.670 | 14.900 | 18.400 | 5.190 | 6.900 | 2.440 | 4.080 | 1.500 |
| 16 | 3.000 | 3.890 | 34.200 | 10.000 | 4.180 | 13.300 | 12.900 | 5.820 | 5.340 | 2.560 | 5.130 | 1.340 |
| 17 | 4.190 | 4.800 | 18.800 | 9.690 | 2.900 | 13.100 | 14.700 | 5.170 | 2.820 | 3.590 | 5.060 | 4.770 |
| 18 | 3.410 | 2.080 | 23.900 | 9.730 | 1.830 | 13.000 | 11.400 | 5.890 | 4.540 | 3.820 | 2.260 | 2.480 |
| 19 | 3.900 | 1.310 | 27.800 | 11.900 | 6.620 | 12.100 | 12.800 | 3.300 | 6.870 | 3.950 | 2.260 | 4.000 |
| 20 | 3.740 | 5.010 | 26.900 | 19.600 | 7.060 | 12.400 | 12.800 | 3.230 | 6.210 | 3.110 | 2.600 | 4.190 |
| 21 | 1.420 | 4.650 | 20.900 | 19.800 | 6.260 | 11.600 | 11.700 | 5.170 | 7.720 | 1.830 | 2.980 | 2.960 |
| 22 | 1.360 | 3.720 | 15.000 | 13.800 | 20.800 | 11.200 | 12.700 | 4.400 | 6.350 | 1.810 | 4.170 | 1.560 |
| 23 | 2.820 | 1.430 | 12.600 | 11.600 | 29.900 | 11.900 | 12.600 | 4.860 | 4.260 | 2.160 | 4.920 | 1.320 |
| 24 | 4.220 | 4.280 | 12.000 | 9.390 | 38.400 | 11.900 | 10.700 | 3.020 | 2.940 | 2.750 | 2.830 | 3.570 |
| 25 | 4.140 | 2.360 | 11.000 | 12.100 | 32.400 | 11.100 | 9.490 | 4.840 | 5.020 | 3.390 | 2.050 | 5.390 |
| 26 | 4.090 | 1.300 | 11.900 | 12.100 | 20.800 | 15.500 | 10.900 | 2.530 | 4.310 | 3.130 | 1.390 | 2.600 |
| 27 | 3.720 | 4.430 | 10.600 | 9.660 | 15.800 | 13.600 | 10.600 | 2.190 | 3.490 | 2.830 | 4.660 | 6.030 |
| 28 | 1.370 | 4.510 | 10.800 | 11.200 | 11.700 | 11.500 | 11.900 | 3.180 | 2.970 | 1.890 | 4.310 | 3.900 |
| 29 | 1.350 | 4.100 | 8.060 | 12.100 |  | 11.900 | 11.300 | 4.400 | 4.020 | 1.480 | 4.270 | 3.350 |
| 30 | 2.390 | 4.600 | 9.680 | 12.000 |  | 10.400 | 10.200 | 3.520 | 3.440 | 3.640 | 1.630 | 1.500 |
| 31 | 4.810 |  | 9.950 | 12.000 |  | 17.300 |  | 4.430 |  | 4.600 | 3.610 |  |

**STATION LOCATION** CHATTAHOOCHEE RIVER AT

LANETT, ALABAMA 120

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 6 | 22 | 62 | 800 | 0 | 0 | 20 | 0 | 0 | 0 | 170 | 620 | 40 | 120 | 87 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 10 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 330 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 700 | 0 | 0 | 80 | 0 | 0 | 0 | 250 | 380 | 40 | 420 | | | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 1200 | 100 | 0 | 20 | 0 | 170 | 0 | 210 | 700 | 170 | 120 | | | | | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 700 | 0 | 0 | 230 | 0 | 60 | 0 | 290 | 170 | 80 | 170 | 68 | 1 | | | | | | | | | | | | | | | | | | |
| 9 | 3 | 62 | 800 | 0 | 0 | 40 | 0 | 150 | 0 | 210 | 460 | 40 | 0 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 600 | 0 | 40 | 40 | 0 | 20 | 0 | 130 | 340 | 40 | 210 | | | | | | | | | | | | | | | | | | | | |

ALABAMA

# PLANKTON POPULATION

MAJOR BASIN SOUTHEAST

MINOR BASIN CHATTAHOOCHEE RIVER

STATION LOCATION CHATTAHOOCHEE RIVER AT

LANETT, ALABAMA 120

| DATE OF SAMPLE MONTH | DATE OF SAMPLE DAY | DATE OF SAMPLE YEAR | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) 1ST SPECIES | 1ST PERCENT | 2ND SPECIES | 2ND PERCENT | 3RD SPECIES | 3RD PERCENT | 4TH SPECIES | 4TH PERCENT | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA Number per ml. | PROTOZOA (Identifiable) Number per ml. | MICROINVERTEBRATES ROTIFERS NUMBER PER LITER | ROTIFERS GENERA AND COUNT LEVEL (See text for Codes) 1ST GENUS | 1ST COUNT LEVEL | 2ND GENUS | 2ND COUNT LEVEL | 3RD GENUS | 3RD COUNT LEVEL | 4TH GENUS | 4TH COUNT LEVEL | 5TH GENUS | 5TH COUNT LEVEL | CRUSTACEA NUMBER PER LITER | CRUSTACEA GENERA AND COUNT LEVEL (See text for Codes) 1ST GENUS | 1ST COUNT LEVEL | 2ND GENUS | 2ND COUNT LEVEL | 3RD GENUS | 3RD COUNT LEVEL | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 22 | 62 | 92 | 8 | 65 | 7 | 71 | 5 | 66 | 4 | 76 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 7 | 10 | 62 | 92 | 25 | 56 | 13 | 74 | 11 | 62 | 10 | 41 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 92 | 10 | 57 | 7 | 2 | 6 | 56 | 4 | 73 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 57 | 16 | 92 | 8 | 95 | 6 | 71 | 5 | 65 | 0 | 0 | 12 | 15 | 2 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 92 | 15 | 57 | 12 | 62 | 7 | 70 | 7 | 59 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 3 | 62 | 92 | 32 | 57 | 21 | 28 | 8 | 62 | 6 | 33 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 92 | 24 | 53 | 8 | 62 | 7 | 57 | 6 | 55 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 3 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** ALABAMA

**MAJOR BASIN** SOUTHEAST

**MINOR BASIN** CHATTAHOOCHEE RIVER

**STATION LOCATION** CHATTAHOOCHEE RIVER AT
LANETT, ALABAMA

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BET |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g |
| 7 | 10 | 62 | 8 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 4 | 5 | 6 | 7 | | | | | |
| 7 | 16 | 62 | 8 | 15 | 1 | 1 | 0 | 1 | 1 | 1 | 9 | 6 | 8 | 5 | 17 | 7 | | | | | |
| 7 | 23 | 62 | 10 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 5 | 9 | 5 | 16 | 7 | | | | | |
| 7 | 30 | 62 | 8 | 22 | 1 | 1 | 0 | 1 | 1 | 1 | 7 | 5 | 8 | 5 | 15 | 7 | | | | | |
| 8 | 6 | 62 | 8 | 27 | 1 | 1 | 0 | 0 | 1 | 0 | 4 | 5 | 9 | 4 | 13 | 7 | | | | | |
| 8 | 20 | 62 | 9 | 7 | 0 | 1 | 0 | 0 | 0 | 1 | 10 | 13 | 14 | 7 | 24 | 15 | | | | | |
| 8 | 27 | 62 | 9 | 11 | 1 | 1 | 0 | 0 | 1 | 1 | 7 | 5 | 6 | 6 | 13 | 7 | | | | | |
| 9 | 3 | 62 | 9 | 18 | 0 | 1 | 0 | 0 | 0 | 1 | 10 | 5 | 14 | 5 | 24 | 7 | | | | | |
| 9 | 10 | 62 | 9 | 27 | 1 | 1 | 0 | 0 | 1 | 1 | 8 | 6 | 6 | 7 | 14 | 9 | | | | | |
| 9 | 12 | 62 | 10 | 10 | 0 | 1 | 0 | 1 | 0 | 1 | 16 | 6 | 13 | 6 | 29 | 8 | | | | | |
| 9 | 24 | 62 | 10 | 16 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 6 | 8 | 6 | 10 | 8 | | | | | |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 6 | 7 | 62 | 6 | 16 | 5130 | 177 | 97 | 80 | 3 | 23 | 32 | 7 | 3 | 22 | 0 | 11 | 12 | 1 | 15 |
| 7 | 12 | 62 | 7 | 20 | 5118 | 155 | 74 | 81 | 1 | 19 | 24 | 3 | 2 | 18 | 1 | 10 | 6 | 1 | 13 |
| 8 | 9 | 62 | 8 | 17 | 5250 | 210 | 97 | 113 | 3 | 27 | 27 | 2 | 1 | 22 | 2 | 13 | 12 | 2 | 13 |
| 9 | 7 | 62 | 9 | 15 | 5080 | 224 | 101 | 123 | 3 | 24 | 34 | 5 | 2 | 26 | 1 | 12 | 10 | 2 | 16 |

**MINOR BASIN** CHATTAHOOCHEE RIVER

**STATION LOCATION** CHATTAHOOCHEE RIVER AT

LANETT, ALABAMA 1

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIF per 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 10 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 23 |
| 7 | 16 | 62 | - | - | 7.7 | - | - | - | - | - | 15 | 24 | - | 5 | 105 | 11 | - | 74 | 22 |
| 7 | 23 | 62 | 30.5 | - | 7.8 | - | - | - | - | - | 7 | 18 | 28 | 5 | *25 | 13 | - | - | 13 |
| 7 | 30 | 62 | 26.7 | - | 7.3 | - | - | - | - | - | - | 15 | 20 | - | 75 | - | - | - | 5 |
| 8 | 6 | 62 | 26.1 | - | 6.5 | - | - | - | - | - | - | 13 | 12 | - | 51 | - | - | - | |
| 8 | 13 | 62 | 27.5 | - | 6.9 | - | - | - | - | - | - | 13 | 18 | - | 32 | - | - | - | 2 |
| 8 | 17 | 62 | - | - | - | - | 11 | - | - | - | - | - | - | - | - | - | - | - | |
| 8 | 20 | 62 | 28.0 | - | 6.8 | - | - | - | - | - | - | 14 | 16 | - | 42 | - | - | - | 3 |
| 8 | 24 | 62 | 25.5 | - | 7.0 | - | - | - | - | - | - | 12 | 16 | - | 31 | - | - | - | |
| 8 | 27 | 62 | - | - | 7.3 | - | - | - | - | - | 6 | 22 | 44 | 5 | 91 | - | - | - | 10 |
| 9 | 3 | 62 | 25.5 | - | 6.5 | - | - | - | - | - | - | 13 | 16 | - | 26 | - | - | - | 3 |
| 9 | 10 | 62 | 24.0 | - | 6.5 | - | - | - | - | - | - | 11 | 12 | - | 31 | - | - | - | 4 |
| 9 | 17 | 62 | 24.6 | - | 6.8 | - | - | - | - | - | - | 12 | 16 | - | 48 | - | - | - | 6 |
| 9 | 24 | 62 | 22.0 | - | 7.6 | - | - | - | - | - | 7 | 22 | 28 | 5 | *25 | 9 | - | 67 | 4 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at West Point, Georgia
Operated by U.S. Geological Survey

| | |
|---|---|
| MAJOR BASIN | Southeast |
| MINOR BASIN | Chattahoochee River |
| STATION LOCATION | Chattahoochee River at Lanett, Alabama |

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.730 | 2.680 | 2.420 | 5.820 | 8.080 | 10.200 | 18.100 | 5.790 | 3.770 | 3.590 | 4.400 | 3.000 |
| 2 | 2.200 | 3.830 | 2.530 | 4.800 | 7.360 | 9.810 | 15.500 | 7.120 | 4.030 | 2.910 | 4.130 | 2.890 |
| 3 | 1.620 | 3.820 | 2.510 | 7.510 | 6.820 | 9.530 | 9.470 | 7.380 | 3.910 | 2.380 | 3.920 | 1.980 |
| 4 | 2.110 | 3.870 | 2.340 | 9.130 | 6.640 | 9.260 | 9.670 | 7.220 | 3.750 | 2.590 | 3.900 | 1.520 |
| 5 | 2.330 | 4.080 | 2.060 | 9.140 | 4.890 | 6.920 | 9.620 | 7.040 | 3.640 | 3.730 | 3.790 | 2.480 |
| 6 | 2.030 | 3.520 | 2.330 | 11.400 | 4.210 | 5.340 | 10.700 | 6.450 | 3.560 | 4.040 | 2.570 | 2.990 |
| 7 | 1.770 | 1.940 | 2.960 | 13.300 | 4.210 | 8.190 | 12.900 | 4.370 | 3.750 | 10.600 | 2.100 | 2.960 |
| 8 | 1.770 | 1.690 | 2.980 | 8.140 | 4.380 | 8.960 | 13.500 | 3.740 | 3.580 | 10.500 | 2.950 | 3.010 |
| 9 | 1.600 | 3.590 | 2.820 | 6.110 | 4.380 | 9.150 | 8.290 | 4.240 | 3.530 | 5.670 | 3.320 | 3.260 |
| 10 | 1.520 | 3.610 | 7.570 | 7.520 | 4.380 | 9.780 | 7.160 | 4.930 | 3.500 | 4.670 | 3.050 | 2.330 |
| 11 | 2.170 | 3.670 | 18.600 | 8.260 | 4.300 | 13.300 | 9.110 | 4.950 | 3.450 | 3.640 | 2.820 | 1.820 |
| 12 | 2.950 | 3.570 | 27.000 | 8.080 | 3.870 | 24.700 | 21.000 | 4.820 | 3.550 | 3.390 | 2.680 | 2.760 |
| 13 | 2.860 | 2.490 | 45.400 | 7.900 | 3.530 | 21.400 | 31.000 | 4.630 | 4.840 | 3.370 | 2.190 | 3.020 |
| 14 | 2.840 | 2.100 | 40.700 | 7.720 | 3.780 | 13.100 | 24.100 | 3.480 | 6.850 | 3.920 | 1.930 | 3.130 |
| 15 | 2.810 | 2.680 | 34.000 | 5.230 | 3.870 | 11.200 | 11.900 | 3.110 | 6.150 | 3.350 | 3.030 | 3.410 |
| 16 | 2.190 | 3.920 | 19.300 | 5.060 | 4.210 | 11.200 | 11.900 | 3.490 | 5.770 | 2.560 | 2.880 | 3.960 |
| 17 | 1.780 | 4.060 | 11.900 | 7.180 | 4.380 | 11.200 | 9.190 | 4.360 | 5.440 | 2.180 | 2.710 | 2.540 |
| 18 | 2.180 | 3.880 | 17.500 | 8.080 | 4.300 | 10.900 | 10.300 | 4.640 | 3.410 | 2.230 | 2.540 | 2.080 |
| 19 | 3.240 | 3.680 | 30.100 | 13.400 | 3.960 | 9.970 | 10.900 | 4.560 | 3.130 | 2.170 | 2.550 | 3.000 |
| 20 | 3.240 | 2.680 | 25.100 | 19.000 | 3.960 | 8.000 | 10.500 | 4.280 | 4.170 | 2.350 | 2.170 | 3.090 |
| 21 | 3.240 | 2.210 | 17.700 | 13.800 | 5.060 | 9.650 | 10.200 | 3.180 | 6.250 | 2.160 | 1.900 | 2.900 |
| 22 | 3.240 | 2.440 | 13.100 | 8.080 | 11.300 | 11.800 | 10.100 | 2.830 | 6.220 | 2.120 | 2.990 | 2.870 |
| 23 | 2.440 | 2.960 | 10.100 | 6.640 | 27.500 | 10.700 | 9.610 | 2.990 | 5.780 | 1.960 | 3.660 | 2.900 |
| 24 | 1.840 | 4.750 | 9.290 | 8.800 | 30.000 | 10.100 | 7.810 | 3.650 | 5.480 | 1.660 | 3.580 | 2.100 |
| 25 | 2.610 | 4.820 | 9.350 | 8.990 | 25.100 | 10.200 | 8.390 | 3.780 | 3.500 | 1.980 | 3.460 | 1.640 |
| 26 | 3.740 | 3.690 | 7.050 | 8.440 | 18.400 | 8.710 | 10.300 | 3.900 | 2.760 | 2.500 | 3.240 | 2.620 |
| 27 | 3.780 | 3.120 | 8.650 | 8.260 | 11.400 | 8.840 | 8.720 | 3.720 | 2.660 | 2.740 | 2.200 | 4.480 |
| 28 | 3.690 | 2.680 | 9.630 | 9.370 | 10.600 | 9.510 | 7.090 | 2.890 | 4.230 | 2.760 | 1.770 | 4.730 |
| 29 | 3.650 | 2.470 | 9.960 | 11.100 | | 9.030 | 7.760 | 2.670 | 5.060 | 2.680 | 2.720 | 3.750 |
| 30 | 2.540 | 2.250 | 9.450 | 9.180 | | 8.590 | 6.660 | 2.800 | 4.220 | 2.960 | 3.110 | 3.140 |
| 31 | 1.880 | | 9.170 | 8.260 | | 11.700 | | 3.500 | | 2.920 | 3.010 | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** GEORGIA
**MAJOR BASIN** SOUTHEAST
**MINOR BASIN** CHATTAHOOCHEE RIVER
**STATION LOCATION** CHATTAHOOCHEE RIVER AT
ATLANTA, GEORGIA 58

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 4 | 61 | 10 | 17 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 3 | 2 | 4 | 2 | 5 | | | | | | |
| 10 | 11 | 61 | 10 | 24 | - | - | - | - | - | - | 6 | 5 | 4 | 5 | 10 | 7 | | | | | | |
| 10 | 18 | 61 | 10 | 31 | - | - | - | - | - | - | 3 | 4 | 3 | 4 | 6 | 6 | | | | | | |
| 10 | 25 | 61 | 11 | 3 | - | - | - | - | - | - | 9 | 5 | 3 | 4 | 12 | 6 | | | | | | |
| 11 | 1 | 61 | 11 | 10 | - | - | - | - | - | - | 243 | 9 | 6 | 5 | 249 | 10 | | | | | | |
| 11 | 8 | 61 | 11 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 7 | 4 | 9 | 6 | | | | | | |
| 11 | 15 | 61 | 11 | 28 | - | - | - | - | - | - | 9 | 4 | 7 | 3 | 16 | 5 | | | | | | |
| 11 | 22 | 61 | 11 | 30 | - | - | - | - | - | - | 0 | 5 | 2 | 5 | 2 | 7 | | | | | | |
| 11 | 29 | 61 | 12 | 4 | - | - | - | - | - | - | 6 | 6 | 3 | 5 | 9 | 8 | | | | | | |
| 12 | 6 | 61 | 12 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 20 | 4 | 14 | 4 | 34 | 6 | | | | | | |
| 12 | 13 | 61 | 12 | 21 | - | - | - | - | - | - | 30 | 8 | 17 | 6 | 47 | 10 | | | | | | |
| 12 | 27 | 61 | 1 | 5 | - | - | - | - | - | - | 7 | 6 | 0 | 5 | 7 | 8 | | | | | | |
| 1 | 3 | 62 | 1 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 4 | 4 | 4 | 11 | 6 | | | | | | |
| 1 | 17 | 62 | 1 | 25 | - | - | - | - | - | - | 9 | 6 | 9 | 5 | 18 | 7 | | | | | | |
| 1 | 24 | 62 | 2 | 1 | - | - | - | - | - | - | 9 | 5 | 4 | 5 | 13 | 7 | | | | | | |
| 1 | 31 | 62 | 2 | 14 | - | - | - | - | - | - | 16 | 5 | 11 | 5 | 27 | 7 | | | | | | |
| 2 | 7 | 62 | 2 | 19 | 1 | 1 | 0 | 1 | 1 | 1 | 14 | 4 | 10 | 4 | 24 | 6 | | | | | | |
| 2 | 14 | 62 | 2 | 27 | - | - | - | - | - | - | 6 | 5 | 14 | 5 | 20 | 7 | | | | | | |
| 3 | 7 | 62 | 3 | 16 | 0 | 1 | 0 | 1 | 0 | 1 | 10 | 4 | 9 | 4 | 19 | 6 | | | | | | |
| 3 | 14 | 62 | 3 | 26 | - | - | - | - | - | - | 31 | 6 | 13 | 5 | 44 | 8 | | | | | | |
| 3 | 21 | 62 | 4 | 3 | - | - | - | - | - | - | 14 | 6 | 12 | 6 | 26 | 8 | | | | | | |
| 3 | 28 | 62 | 4 | 6 | - | - | - | - | - | - | 22 | 5 | 4 | 4 | 26 | 6 | | | | | | |
| 4 | 4 | 62 | 4 | 17 | 0 | 1 | 0 | 0 | 0 | 1 | 22 | 5 | 13 | 4 | 35 | 6 | | | | | | |
| 4 | 11 | 62 | 4 | 25 | - | - | - | - | - | - | 8 | 6 | 7 | 5 | 15 | 7 | | | | | | |
| 4 | 18 | 62 | 5 | 1 | - | - | - | - | - | - | 15 | 6 | 5 | 5 | 20 | 7 | | | | | | |
| 4 | 25 | 62 | 5 | 28 | - | - | - | - | - | - | 1 | 7 | 7 | 6 | 8 | 9 | | | | | | |
| 5 | 2 | 62 | 6 | 4 | - | - | - | - | - | - | 8 | 7 | 8 | 6 | 16 | 9 | | | | | | |
| 5 | 9 | 62 | 6 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 5 | 8 | 5 | 12 | 7 | | | | | | |
| 5 | 16 | 62 | 6 | 26 | - | - | - | - | - | - | 0 | 10 | 5 | 6 | 5 | 12 | | | | | | |
| 5 | 23 | 62 | 6 | 27 | - | - | - | - | - | - | 3 | 6 | 2 | 5 | 5 | 8 | | | | | | |
| 5 | 30 | 62 | 7 | 2 | - | - | - | - | - | - | 2 | 5 | 9 | 5 | 11 | 7 | | | | | | |
| 6 | 6 | 62 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 5 | 4 | 5 | 10 | 7 | | | | | | |
| 6 | 11 | 62 | 7 | 10 | - | - | - | - | - | - | 10 | 5 | 7 | 4 | 17 | 6 | | | | | | |
| 6 | 20 | 62 | 7 | 18 | - | - | - | - | - | - | 10 | 5 | 9 | 6 | 19 | 7 | | | | | | |
| 6 | 27 | 62 | 7 | 30 | - | - | - | - | - | - | 1 | 6 | 2 | 6 | 3 | 8 | | | | | | |
| 7 | 11 | 62 | 8 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 6 | 9 | 6 | 17 | 8 | | | | | | |
| 7 | 16 | 62 | 8 | 8 | - | - | - | - | - | - | 3 | 5 | 8 | 5 | 11 | 7 | | | | | | |
| 7 | 25 | 62 | 8 | 21 | - | - | - | - | - | - | 10 | 5 | 12 | 5 | 22 | 7 | | | | | | |
| 8 | 1 | 62 | 8 | 21 | - | - | - | - | - | - | 3 | 5 | 5 | 5 | 8 | 7 | | | | | | |
| 8 | 8 | 62 | 8 | 27 | 1 | 1 | 0 | 1 | 1 | 1 | 14 | 3 | 2 | 2 | 16 | 4 | | | | | | |
| 8 | 15 | 62 | 8 | 29 | - | - | - | - | - | - | 11 | 7 | 0 | 6 | 11 | 9 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 8 | 22 | 62 | 9 | 5 | - | - | - | - | - | - | 9 | 6 | 9 | 5 | 18 | 7 | | | | | | |
| 8 | 29 | 62 | 9 | 14 | - | - | - | - | - | - | 3 | 6 | 6 | 8 | 9 | 10 | | | | | | |
| 9 | 5 | 62 | 9 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 7 | 5 | 13 | 7 | | | | | | |
| 9 | 20 | 62 | 10 | 10 | - | - | - | - | - | - | 5 | 5 | 7 | 5 | 12 | 7 | | | | | | |
| 9 | 26 | 62 | 10 | 24 | - | - | - | - | - | - | 5 | 6 | 7 | 5 | 12 | 8 | | | | | | |

**STATION LOCATION** CHATTAHOOCHEE RIVER AT
ATLANTA, GEORGIA

| DATE OF SAMPLE | | | TOTAL | ALGAE *(Number per milliliter)* | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLUE - GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 4 | 61 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 10 | 18 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 1 | 61 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 20 | | | | | | | | | | | | | | | | | | | | |
| 11 | 22 | 61 | 100 | 0 | 0 | 20 | 0 | 0 | 0 | 40 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 5 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 40 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 12 | 27 | 61 | 300 | 0 | 0 | 50 | 0 | 50 | 0 | 160 | 50 | 90 | 90 | | | | | | | | | | | | | | | | | | | | |
| 1 | 3 | 62 | 300 | 0 | 0 | 0 | 0 | 110 | 0 | 110 | 50 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 1 | 17 | 62 | 100 | 0 | 0 | 20 | 0 | 0 | 0 | 50 | 20 | 50 | 110 | | | | | | | | | | | | | | | | | | | | |
| 2 | 7 | 62 | 200 | 0 | 0 | 0 | 0 | 20 | 0 | 90 | 90 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 3 | 7 | 62 | 600 | 0 | 0 | 20 | 0 | 0 | 0 | 390 | 210 | 20 | 0 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 21 | 62 | 500 | 0 | 0 | 0 | 0 | 20 | 0 | 270 | 250 | 160 | 130 | 77 | 1 | 69 | 1 | | | | | | | | | | | | | | | | |
| 4 | 4 | 62 | 900 | 0 | 0 | 80 | 0 | 20 | 20 | 310 | 440 | 60 | 80 | 69 | 1 | 92 | 1 | 77 | 1 | | | | | | | | | | | | | | |
| 4 | 18 | 62 | 700 | 0 | 20 | 60 | 0 | 20 | 0 | 230 | 340 | 40 | 150 | 69 | 1 | 77 | 1 | | | | | | | | | | | | | | | | |
| 5 | 9 | 62 | 700 | 0 | 0 | 150 | 0 | 190 | 40 | 120 | 230 | 40 | 40 | | | | | | | | | | | | | | | | | | | | |
| 5 | 23 | 62 | 400 | 20 | 0 | 80 | 0 | 0 | 60 | 130 | 150 | 130 | 130 | | | | | | | | | | | | | | | | | | | | |
| 6 | 6 | 62 | 500 | 250 | 0 | 0 | 0 | 0 | 0 | 80 | 210 | 0 | 80 | 2 | 1 | | | | | | | | | | | | | | | | | | |
| 6 | 20 | 62 | 300 | 0 | 0 | 20 | 0 | 0 | 0 | 60 | 230 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 7 | 11 | 62 | 200 | 0 | 0 | 20 | 0 | 0 | 0 | 110 | 40 | 0 | 80 | | | | | | | | | | | | | | | | | | | | |
| 7 | 18 | 62 | 400 | 0 | 0 | 40 | 0 | 40 | 0 | 80 | 250 | 40 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 1 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 370 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 22 | 62 | 700 | 0 | 0 | 0 | 0 | 0 | 40 | 80 | 540 | 0 | 40 | 87 | 1 | 97 | 1 | | | | | | | | | | | | | | | | |
| 9 | 5 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 40 | 40 | 40 | | | | | | | | | | | | | | | | | | | | |
| 9 | 20 | 62 | 100 | 0 | 10 | 40 | 0 | 20 | 0 | 10 | 20 | 20 | 40 | | | | | | | | | | | | | | | | | | | | |

STATE GEORGIA

# PLANKTON POPULATION

MAJOR BASIN SOUTHEAST

MINOR BASIN CHATTAHOOCHEE RIVER

STATION LOCATION CHATTAHOOCHEE RIVER AT

ATLANTA, GEORGIA 058

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 4 | 61 | 65 | 15 | 57 | 10 | 2 | 7 | 56 | 5 | 63 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 18 | 61 | | | | | | | | | | 370 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 1 | 61 | 57 | 15 | 95 | 11 | 56 | 8 | 65 | 6 | 60 | 0 | 0 | 11 | | | | | | | | | | | 0 | | | | | | | 1 | 1 |
| 11 | 22 | 61 | | | | | | | | | | 60 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 5 | 61 | 57 | 10 | 62 | 10 | 56 | 9 | 28 | 9 | 62 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 27 | 61 | | | | | | | | | | 0 | 0 | 3 | | | | | | | | | | | 3 | | | | | | | 1 | 0 |
| 1 | 3 | 62 | | | | | | | | | | 140 | 0 | 4 | | | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 1 | 17 | 62 | 57 | 35 | 95 | 12 | 28 | 11 | 2 | 7 | 35 | 50 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 2 | 7 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 7 | 62 | 57 | 26 | 95 | 24 | 9 | 13 | 92 | 7 | 30 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 21 | 62 | 57 | 35 | 95 | 16 | 9 | 6 | 27 | 6 | 37 | 0 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 4 | 62 | 9 | 34 | 57 | 30 | 92 | 11 | 95 | 10 | 15 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 18 | 62 | 57 | 35 | 9 | 34 | 95 | 7 | 92 | 3 | 21 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 9 | 62 | 57 | 31 | 92 | 26 | 9 | 12 | 95 | 8 | 23 | 40 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 23 | 62 | 92 | 20 | 57 | 18 | 2 | 6 | 95 | 5 | 51 | 0 | 0 | 10 | 20 | 1 | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 6 | 6 | 62 | 57 | 26 | 2 | 10 | 92 | 8 | 95 | 3 | 53 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 20 | 62 | 96 | 11 | 65 | 8 | 43 | 8 | 57 | 7 | 66 | 20 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 7 | 11 | 62 | 57 | 25 | 28 | 8 | 65 | 7 | 64 | 5 | 55 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | – | – |
| 7 | 18 | 62 | 57 | 26 | 2 | 10 | 95 | 4 | 65 | 4 | 56 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 8 | 1 | 62 | 57 | 17 | 65 | 11 | 2 | 9 | 95 | 8 | 55 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 22 | 62 | 65 | 12 | 57 | 9 | 71 | 6 | 43 | 6 | 67 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 5 | 62 | 57 | 16 | 2 | 8 | 28 | 8 | 95 | 8 | 60 | 0 | 0 | 2 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 9 | 20 | 62 | 26 | 15 | 27 | 11 | 57 | 8 | 28 | 7 | 59 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**MINOR BASIN** CHATTAHOOCHEE RIVER

**STATION LOCATION** CHATTAHOOCHEE RIVER AT
ATLANTA, GEORGIA

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 10 | 2 | 61 | 10 | 20 | 5090 | 179 | 62 | 117 | 2 | 17 | 16 | 1 | 1 | 13 | 1 | 7 | 5 | 2 | 13 |
| 11 | 14 | 61 | 12 | 5 | 6080 | 174 | 41 | 133 | 1 | 11 | 12 | 1 | 0 | 10 | 1 | 5 | 2 | 1 | 9 |
| 1 | 18 | 62 | 2 | 16 | 5020 | 259 | 80 | 179 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 14 | 62 | 4 | 19 | 5120# | 183 | 84 | 99 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 14 | 62 | | * | 10140 | 221 | 82 | 139 | 4 | 21 | 23 | 1 | 2 | 19 | 1 | 10 | 7 | 1 | 16 |
| 5 | 8 | 62 | 6 | 7 | 5040 | 112 | 52 | 60 | 2 | 15 | 12 | 1 | 1 | 9 | 1 | 5 | 5 | 1 | 12 |
| 6 | 25 | 62 | 8 | 6 | 5150 | 161 | 65 | 96 | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 29 | 62 | 9 | 13 | 5070 | 110 | 42 | 68 | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 29 | 62 | | * | 10220 | 135 | 53 | 82 | 2 | 12 | 16 | 1 | 1 | 12 | 2 | 6 | 3 | 1 | 13 |
| 9 | 26 | 62 | 10 | 10 | 5210 | 134 | 74 | 60 | - | - | - | - | - | - | - | - | - | - | - |

# ESTIMATED

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 4 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2900 |
| 10 | 11 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 970 |
| 10 | 18 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 880 |
| 10 | 20 | 61 | - | - | - | - | 8 | - | - | - | - | - | - | - | - | - | - | - | - |
| 10 | 25 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 350 |
| 11 | 1 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 370 |
| 11 | 8 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 620 |
| 11 | 15 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .1 | - | 2300 |
| 11 | 22 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 170 |
| 11 | 29 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | *11 |
| 12 | 5 | 61 | - | - | - | - | 12 | - | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 6 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .1 | - | 530 |
| 12 | 13 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .2 | - | 26000 |
| 12 | 15 | 61 | - | - | - | - | 12 | - | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 22 | 61 | - | - | - | - | 10 | - | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 27 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .1 | - | 820 |
| 1 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 1300 |
| 1 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .1 | - | *22 |
| 1 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 4200 |
| 1 | 31 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 2000 |
| 2 | 7 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | *22 |
| 2 | 14 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 360 |
| 2 | 16 | 62 | - | - | - | - | 8 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 7 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 330 |
| 3 | 14 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1000 |
| 3 | 21 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2200 |
| 3 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 670 |
| 4 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1300 |
| 4 | 11 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 530 |
| 4 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 270 |
| 4 | 19 | 62 | - | - | - | - | 24 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 25 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 620 |
| 5 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 9200 |
| 5 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 5000 |
| 5 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 1000 |
| 5 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 1200 |
| 5 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 6 |
| 6 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 6 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 670 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 13 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 6 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 1200 |
| 6 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4800 |
| 7 | 11 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 850 |
| 7 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | *25 | - | .0 | - | - |
| 7 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1700 |
| 7 | 25 | 62 | - | - | - | - | - | - | - | - | 4 | 16 | 24 | - | - | 6 | .0 | - | 3400 |
| 8 | 1 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 2200 |
| 8 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 14000 |
| 8 | 15 | 62 | - | - | - | - | 8 | - | - | - | 7 | 20 | - | 0 | 25 | 8 | - | 40 | 8600 |
| 8 | 22 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 13000 |
| 8 | 29 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3000 |
| 9 | 5 | 62 | - | - | 7.6 | - | - | - | - | - | 8 | 14 | 24 | 0 | *25 | 3 | .0 | - | 2000 |
| 9 | 13 | 62 | - | - | - | - | 24 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 20 | 62 | - | - | - | - | - | - | - | - | 4 | 8 | 8 | 5 | 25 | - | .0 | - | - |
| 9 | 26 | 62 | - | - | 7.7 | - | - | - | - | - | 4 | 14 | 32 | 0 | *25 | 2 | - | 47 | *22 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Atlanta, Georgia
Operated by U.S. Geological Survey

MAJOR BASIN Southeast

MINOR BASIN Chattahoochee River

STATION LOCATION Chattahoochee River at Atlanta, Georgia

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .830 | 3.620 | 1.360 | 1.750 | 3.470 | 6.280 | 3.840 | 4.360 | 2.160 | 1.080 | 3.040 | 1.630 |
| 2 | .888 | 3.570 | 1.200 | 5.930 | 3.800 | 5.760 | 3.400 | 4.440 | 1.600 | 1.250 | 3.000 | 1.060 |
| 3 | 1.620 | 3.720 | .820 | 6.640 | 2.260 | 5.590 | 5.420 | 4.460 | 1.150 | 1.830 | 3.100 | 2.160 |
| 4 | 1.310 | 3.370 | .954 | 6.640 | 1.050 | 1.700 | 5.590 | 4.350 | 1.250 | 2.270 | 1.930 | 2.720 |
| 5 | 1.050 | .982 | 1.500 | 6.640 | 1.080 | 3.120 | 7.000 | 2.910 | 1.730 | 2.450 | 1.240 | 2.730 |
| 6 | 1.060 | .713 | 1.520 | 6.020 | 1.520 | 5.760 | 7.000 | 1.230 | 1.970 | 4.700 | 1.880 | 2.770 |
| 7 | .874 | 3.020 | 1.510 | 1.570 | 1.540 | 6.280 | 6.820 | 1.640 | 1.840 | 1.980 | 2.200 | 2.720 |
| 8 | .808 | 3.180 | 1.430 | 2.180 | 1.550 | 6.280 | 1.740 | 2.710 | 1.960 | 1.300 | 2.150 | 1.780 |
| 9 | 1.560 | 3.170 | 1.080 | 4.400 | 1.580 | 6.460 | 3.360 | 2.960 | 1.540 | 1.620 | 2.130 | 1.160 |
| 10 | 2.600 | 3.230 | 2.330 | 5.250 | 1.180 | 5.420 | 5.930 | 2.820 | 1.210 | 2.120 | 2.010 | 2.320 |
| 11 | 2.520 | 1.780 | 2.560 | 5.180 | .898 | 2.870 | 7.180 | 2.840 | 1.320 | 1.880 | 1.470 | 2.460 |
| 12 | 2.500 | 1.260 | 14.100 | 5.160 | 1.170 | 4.400 | 11.400 | 1.880 | 4.410 | 2.510 | 1.060 | 2.580 |
| 13 | 2.510 | 1.690 | 13.500 | 4.190 | 1.400 | 4.910 | 5.250 | 1.210 | 5.000 | 2.170 | 1.200 | 2.500 |
| 14 | 1.740 | 2.940 | 5.930 | 1.370 | 1.460 | 5.250 | 4.400 | 1.550 | 4.710 | 1.220 | 1.800 | 2.470 |
| 15 | 1.260 | 3.000 | 2.400 | 2.380 | 1.440 | 6.640 | 6.460 | 2.770 | 4.400 | .810 | 1.860 | 1.600 |
| 16 | 1.580 | 3.080 | 1.850 | 5.380 | 1.520 | 7.000 | 3.940 | 2.880 | 3.220 | .990 | 1.720 | 1.190 |
| 17 | 3.060 | 3.000 | 1.930 | 5.750 | 1.150 | 7.000 | 6.460 | 3.060 | 1.340 | 1.110 | 1.860 | 2.260 |
| 18 | 2.960 | 1.880 | 12.400 | 5.490 | 1.040 | 5.760 | 7.000 | 2.900 | 1.410 | 1.280 | 1.430 | 2.700 |
| 19 | 3.020 | 1.280 | 6.820 | 5.500 | 1.380 | 3.760 | 7.000 | 1.830 | 4.550 | 1.210 | 1.180 | 2.420 |
| 20 | 3.000 | 1.610 | 7.000 | 4.200 | 2.410 | 5.590 | 6.640 | 1.290 | 4.680 | 1.180 | 1.600 | 2.420 |
| 21 | 2.060 | 1.790 | 5.840 | 1.400 | 2.420 | 6.280 | 7.000 | 1.340 | 4.560 | 1.040 | 2.800 | 2.550 |
| 22 | 1.270 | 1.820 | 5.250 | 2.400 | 10.300 | 6.460 | 6.280 | 2.140 | 4.470 | .815 | 2.850 | 1.620 |
| 23 | 1.840 | 2.730 | 5.230 | 3.700 | 9.130 | 6.280 | 3.600 | 2.430 | 3.340 | .995 | 2.720 | 1.100 |
| 24 | 3.600 | 2.270 | 5.480 | 4.000 | 7.000 | 4.920 | 5.930 | 2.560 | 1.330 | 1.100 | 2.730 | 2.020 |
| 25 | 3.700 | 1.750 | 3.560 | 3.940 | 7.000 | 1.420 | 6.820 | 2.480 | 1.270 | 1.230 | 1.660 | 3.140 |
| 26 | 3.600 | 1.300 | 5.910 | 3.960 | 3.720 | 3.300 | 3.330 | 1.500 | 1.870 | 1.650 | 1.190 | 3.090 |
| 27 | 3.530 | 1.190 | 6.440 | 2.720 | 5.620 | 4.910 | 3.040 | 1.300 | 2.200 | 1.130 | 2.090 | 3.180 |
| 28 | 2.430 | 1.010 | 6.720 | 2.810 | 5.930 | 4.740 | 1.980 | 1.320 | 2.390 | 1.030 | 2.870 | 2.300 |
| 29 | 1.260 | 1.170 | 6.510 | 3.080 |  | 4.910 | 1.370 | 1.960 | 2.220 | 1.020 | 2.750 | 1.870 |
| 30 | 1.610 | 1.420 | 5.560 | 3.820 |  | 4.740 | 2.670 | 1.830 | 1.650 | 2.450 | 2.730 | 1.320 |
| 31 | 3.900 |  | 1.330 | 3.960 |  | 5.250 |  | 1.750 |  | 3.400 | 2.660 |  |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** ALASKA
**MAJOR BASIN** ALASKA
**MINOR BASIN** YUKON RIVER
**STATION LOCATION** CHENA SLOUGH AT
FAIRBANKS, ALASKA 111

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 6 | 5 | 62 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 250 | 130 | 340 | | | | | | | | | | | | | | | | | | | | |
| 6 | 21 | 62 | 500 | 0 | 20 | 0 | 0 | 20 | 0 | 100 | 330 | 0 | 20 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 600 | 80 | 20 | 0 | 0 | 0 | 0 | 40 | 500 | 20 | 80 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 700 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 680 | 40 | 420 | 92 | 2 | | | | | | | | | | | | | | | | | | |
| 7 | 30 | 62 | 300 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 290 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 800 | 0 | 0 | 0 | 0 | 40 | 0 | 40 | 700 | 0 | 250 | 92 | 2 | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 700 | 0 | 0 | 0 | 0 | 40 | 0 | 40 | 580 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 00 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 20 | 60 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 6 | 5 | 62 | 92 | 33 | 46 | 8 | 2 | 6 | 14 | 5 | 48 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 21 | 62 | 92 | 43 | 14 | 9 | 45 | 7 | 2 | 4 | 37 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 92 | 62 | 14 | 21 | 45 | 8 | 26 | 1 | 8 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 92 | 60 | 14 | 24 | 45 | 5 | 36 | 4 | 7 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 30 | 62 | 14 | 31 | 92 | 18 | 2 | 8 | 46 | 6 | 37 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 92 | 76 | 14 | 16 | 36 | 2 | 52 | 2 | 4 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 92 | 16 | 14 | 15 | 2 | 9 | 35 | 7 | 53 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 92 | 35 | 49 | 16 | 35 | 10 | 14 | 4 | 35 | 10 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** ALASKA
**MAJOR BASIN** ALASKA
**MINOR BASIN** YUKON RIVER
**STATION LOCATION** CHENA SLOUGH AT
FAIRBANKS, ALASKA

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 11 | 17 | 61 | 12 | 21 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 4 | 2 | 4 | 3 | 6 | | | | | | |
| 11 | 17 | 61 | 12 | 26 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 4 | 3 | 4 | 3 | 6 | | | | | | |
| 1 | 19 | 62 | 2 | 9 | 1 | 1 | 0 | 0 | 1 | 1 | 176 | 117 | 176 | 7 | 352 | 10 | | | | | | |
| 1 | 26 | 62 | 2 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 563 | 13 | 96 | 6 | 659 | 14 | | | | | | |
| 3 | 14 | 62 | 4 | 4 | 1 | 1 | 1 | 1 | 2 | 1 | 3 | 4 | 3 | 5 | 6 | 6 | | | | | | |
| 6 | 5 | 62 | 7 | 5 | 1 | 1 | 0 | 1 | 1 | 1 | 7 | 7 | 10 | 6 | 17 | 9 | | | | | | |
| 6 | 21 | 62 | 7 | 18 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 5 | 4 | 6 | 10 | 7 | | | | | | |
| 6 | 28 | 62 | 7 | 31 | 0 | 1 | 1 | 1 | 1 | 1 | 5 | 5 | 6 | 7 | 11 | 9 | | | | | | |
| 7 | 9 | 62 | 8 | 6 | 1 | 1 | 0 | 1 | 1 | 1 | 3 | 6 | 8 | 6 | 11 | 8 | | | | | | |
| 7 | 16 | 62 | 8 | 15 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 12 | 6 | 7 | 6 | 14 | | | | | | |
| 7 | 23 | 62 | 8 | 15 | 3 | 3 | 0 | 2 | 3 | 4 | 27 | 11 | 7 | 6 | 34 | 13 | | | | | | |
| 7 | 30 | 62 | 8 | 21 | 1 | 1 | 0 | 1 | 1 | 1 | 9 | 6 | 7 | 6 | 16 | 8 | | | | | | |
| 8 | 6 | 62 | 10 | 8 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 7 | 12 | 8 | 16 | 11 | | | | | | |
| 8 | 13 | 62 | 10 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 8 | 6 | 10 | 7 | | | | | | |
| 8 | 20 | 62 | 10 | 13 | 0 | 0 | 1 | 1 | 1 | 1 | 4 | 5 | 8 | 6 | 12 | 7 | | | | | | |
| 8 | 27 | 62 | 9 | 11 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 5 | 13 | 6 | 20 | 7 | | | | | | |
| 9 | 4 | 62 | 9 | 18 | 1 | 1 | 0 | 1 | 1 | 1 | 19 | 6 | 22 | 6 | 41 | 8 | | | | | | |
| 9 | 10 | 62 | 10 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 7 | 6 | 9 | 7 | | | | | | |
| 9 | 17 | 62 | 10 | 8 | 0 | 0 | 0 | 1 | 0 | 1 | 27 | 5 | 62 | 6 | 89 | 7 | | | | | | |
| 9 | 24 | 62 | 10 | 18 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 6 | 9 | 6 | 14 | 8 | | | | | | |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 11 | 17 | 61 | - | - | - | - | - | - | - | - | 5 | 64 | - | 5 | - | 21 | .1 | 125 | - |
| 6 | 28 | 62 | - | - | - | - | - | - | - | - | 4 | 56 | 88 | 10 | *25 | 27 | .0 | 97 | - |
| 8 | 20 | 62 | - | - | - | - | - | - | - | - | 2 | 72 | 72 | 10 | - | 19 | - | - | - |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | 2 | 60 | 76 | 15 | - | 18 | .0 | 63 | - |
| 9 | 4 | 62 | 5.4 | - | 7.1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 10 | 62 | 5.0 | - | 7.0 | - | - | - | - | - | 3 | 56 | 64 | 20 | 25 | 16 | .0 | 100 | - |
| 9 | 17 | 62 | 3.5 | - | 7.1 | - | - | - | - | - | 3 | 56 | 68 | 15 | *25 | 18 | .0 | 106 | - |
| 9 | 24 | 62 | 4.4 | - | 7.0 | - | - | - | - | - | 2 | 60 | 80 | 20 | *25 | 22 | .0 | 100 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Fairbanks, Alaska
Operated by U.S. Geological Survey

STATE Alaska

MAJOR BASIN Alaska

MINOR BASIN Yukon River

STATION LOCATION Chena Slough at Fairbanks, Alaska

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.510 | .900 | .600 | .500 | .440 | .380 | .400 | .580 | 12.100 | 2.900 | 4.480 | 12.000 |
| 2 | 5.650 | .900 | .600 | .500 | .440 | .380 | .400 | .600 | 9.500 | 2.680 | 4.160 | 12.500 |
| 3 | 4.920 | .900 | .600 | .500 | .440 | .380 | .400 | .640 | 8.210 | 2.510 | 3.960 | 11.700 |
| 4 | 4.480 | .900 | .600 | .500 | .440 | .380 | .400 | .670 | 7.030 | 2.360 | 3.820 | 11.400 |
| 5 | 4.170 | .900 | .600 | .500 | .440 | .380 | .400 | .710 | 6.890 | 2.270 | 3.740 | 11.100 |
| 6 | 3.840 | .900 | .600 | .500 | .440 | .380 | .400 | .760 | 7.180 | 2.180 | 3.600 | 9.540 |
| 7 | 3.590 | .900 | .600 | .500 | .440 | .380 | .400 | .820 | 6.580 | 2.140 | 3.460 | 8.270 |
| 8 | 3.350 | .900 | .600 | .500 | .440 | .380 | .400 | .920 | 5.880 | 2.080 | 3.340 | 7.270 |
| 9 | 3.000 | .900 | .600 | .500 | .440 | .380 | .400 | 1.100 | 5.980 | 2.040 | 3.280 | 6.520 |
| 10 | 2.500 | .900 | .600 | .500 | .440 | .380 | .400 | 1.600 | 5.350 | 2.020 | 3.230 | 5.980 |
| 11 | 2.100 | .900 | .600 | .500 | .440 | .380 | .400 | 2.330 | 5.220 | 1.960 | 3.120 | 5.520 |
| 12 | 1.600 | .900 | .600 | .500 | .440 | .380 | .400 | 2.970 | 5.090 | 1.900 | 2.970 | 5.130 |
| 13 | 1.500 | .900 | .600 | .500 | .440 | .380 | .400 | 3.940 | 4.880 | 1.950 | 2.820 | 4.820 |
| 14 | 1.400 | .900 | .600 | .500 | .440 | .380 | .400 | 5.020 | 4.690 | 3.210 | 2.700 | 4.570 |
| 15 | 1.400 | .900 | .600 | .500 | .440 | .380 | .400 | 7.340 | 4.500 | 3.890 | 2.590 | 4.340 |
| 16 | 1.400 | .900 | .600 | .500 | .440 | .380 | .400 | 9.040 | 4.700 | 3.230 | 2.490 | 4.160 |
| 17 | 1.500 | .900 | .600 | .500 | .440 | .380 | .400 | 10.300 | 4.390 | 2.830 | 2.430 | 4.040 |
| 18 | 1.600 | .900 | .600 | .500 | .440 | .380 | .400 | 11.600 | 3.960 | 2.540 | 2.470 | 3.940 |
| 19 | 1.600 | .900 | .600 | .500 | .440 | .380 | .400 | 11.400 | 3.650 | 2.390 | 2.500 | 3.800 |
| 20 | 1.700 | .900 | .600 | .500 | .440 | .380 | .400 | 11.000 | 3.320 | 2.260 | 2.470 | 3.630 |
| 21 | 1.800 | .900 | .600 | .500 | .440 | .380 | .400 | 11.900 | 3.110 | 2.160 | 2.470 | 3.520 |
| 22 | 1.700 | .900 | .600 | .500 | .440 | .380 | .400 | 12.700 | 3.220 | 2.360 | 2.470 | 3.420 |
| 23 | 1.700 | .900 | .600 | .500 | .440 | .380 | .400 | 13.100 | 5.350 | 3.880 | 2.490 | 3.310 |
| 24 | 1.700 | .900 | .600 | .500 | .440 | .380 | .400 | 13.200 | 5.590 | 3.870 | 2.490 | 3.190 |
| 25 | 1.600 | .900 | .600 | .500 | .440 | .380 | .400 | 13.400 | 4.340 | 4.380 | 2.660 | 3.100 |
| 26 | 1.600 | .900 | .600 | .500 | .440 | .380 | .400 | 13.400 | 3.690 | 7.500 | 2.830 | 3.080 |
| 27 | 1.500 | .900 | .600 | .500 | .440 | .380 | .400 | 13.800 | 3.320 | 8.960 | 2.990 | 3.140 |
| 28 | 1.400 | .900 | .600 | .500 | .440 | .380 | .400 | 13.900 | 3.140 | 7.460 | 4.520 | 3.130 |
| 29 | 1.400 | .900 | .600 | .500 | .440 | .380 | .400 | 13.700 | 3.110 | 6.240 | 7.220 | 3.020 |
| 30 | 1.300 | .900 | .600 | .500 | .440 | .380 | .400 | 13.600 | 3.060 | 5.470 | 8.570 | 2.920 |
| 31 | 1.300 |  | .600 | .500 |  | .380 |  | 13.300 |  | 4.920 | 10.800 |  |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 11 | 27 | 61 | 12 | 26 | 2330 | 236 | 81 | 155 | 2 | 16 | 29 | 7 | 3 | 18 | 1 | 13 | 7 | 1 | 13 |
| 12 | 26 | 61 | 1 | 30 | 3300 | 236 | 65 | 171 | 1 | 13 | 19 | 3 | 3 | 11 | 2 | 12 | 6 | 1 | 13 |
| 1 | 31 | 62 | 2 | 20 | 3720 | 154 | 37 | 117 | 1 | 8 | 13 | 3 | 1 | 8 | 1 | 8 | 2 | 0 | 5 |
| 2 | 21 | 62 | 3 | 20 | 3960 | 169 | 41 | 128 | 1 | 9 | 14 | 3 | 2 | 8 | 1 | 8 | 3 | 0 | 6 |
| 3 | 21 | 62 | 4 | 17 | 5700 | 135 | 49 | 86 | 2 | 11 | 11 | 2 | 1 | 8 | 0 | 6 | 5 | 1 | 13 |
| 4 | 18 | 62 | 5 | 22 | 3090 | 166 | 73 | 93 | 3 | 19 | 14 | 1 | 1 | 11 | 1 | 9 | 8 | 1 | 19 |
| 5 | 23 | 62 | 6 | 18 | 6750 | 96 | 55 | 41 | 6 | 15 | 9 | 1 | 1 | 7 | 0 | 6 | 6 | 1 | 12 |
| 6 | 19 | 62 | 7 | 9 | 8700 | 97 | 57 | 40 | 1 | 14 | 12 | 2 | 1 | 9 | 0 | 7 | 7 | 1 | 15 |
| 8 | 7 | 62 | 8 | 20 | 3320 | 182 | 74 | 108 | 1 | 15 | 25 | 5 | 2 | 18 | 0 | 14 | 5 | 2 | 12 |
| 8 | 21 | 62 | 9 | 11 | 3970 | 131 | 59 | 72 | 0 | 15 | 18 | 2 | 1 | 13 | 2 | 11 | 5 | 1 | 9 |

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** MIDDLE & LOWER SNAKE RIVER

**STATION LOCATION** CLEARWATER RIVER AT
LEWISTON, IDAHO 97

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 10 | 61 | 10 | 26 | 0 | 1 | 0 | 0 | 0 | 1 | 7 | 4 | 9 | 4 | 16 | 6 | | | | | | |
| 10 | 17 | 61 | 11 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 4 | 15 | 5 | 21 | 6 | | | | | | |
| 10 | 24 | 61 | 11 | 3 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 4 | 16 | 4 | 23 | 6 | | | | | | |
| 10 | 31 | 61 | 11 | 13 | 0 | 0 | 0 | 1 | 0 | 1 | 19 | 4 | 51 | 6 | 70 | 7 | | | | | | |
| 11 | 7 | 61 | 11 | 24 | 1 | 1 | 1 | 2 | 2 | 2 | 43 | 8 | 35 | 4 | 78 | 9 | | | | | | |
| 11 | 14 | 61 | 11 | 28 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 4 | 22 | 4 | 28 | 6 | | | | | | |
| 11 | 21 | 61 | 12 | 5 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 4 | 23 | 5 | 28 | 6 | | | | | | |
| 11 | 28 | 61 | 12 | 8 | 0 | 1 | 0 | 1 | 0 | 1 | 11 | 4 | 31 | 5 | 42 | 6 | | | | | | |
| 12 | 5 | 61 | 12 | 18 | 0 | 1 | 0 | 0 | 0 | 1 | 27 | 5 | 55 | 5 | 82 | 7 | | | | | | |
| 12 | 12 | 61 | 12 | 27 | 0 | 1 | 1 | 1 | 1 | 1 | 46 | 5 | 24 | 5 | 70 | 7 | | | | | | |
| 12 | 19 | 61 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 4 | 21 | 4 | 34 | 6 | | | | | | |
| 12 | 26 | 61 | 1 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 37 | 5 | 45 | 5 | 82 | 7 | | | | | | |
| 1 | 2 | 62 | 1 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 28 | 6 | 39 | 6 | 67 | 8 | | | | | | |
| 1 | 9 | 62 | 1 | 22 | 0 | 1 | 0 | 1 | 0 | 1 | 101 | 7 | 86 | 6 | 187 | 9 | | | | | | |
| 1 | 16 | 62 | 2 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 12 | 4 | 25 | 4 | 37 | 6 | | | | | | |
| 1 | 23 | 62 | 2 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 4 | 18 | 5 | 22 | 6 | | | | | | |
| 1 | 30 | 62 | 2 | 13 | 0 | 1 | 0 | 1 | 0 | 1 | 21 | 4 | 37 | 5 | 58 | 6 | | | | | | |
| 2 | 6 | 62 | 2 | 20 | 0 | 1 | 0 | 0 | 0 | 1 | 8 | 4 | 18 | 4 | 26 | 6 | | | | | | |
| 2 | 13 | 62 | 2 | 27 | 1 | 1 | 0 | 1 | 1 | 1 | 24 | 4 | 22 | 4 | 46 | 5 | | | | | | |
| 2 | 20 | 62 | 3 | 7 | 0 | 1 | 0 | 0 | 0 | 1 | 9 | 4 | 15 | 4 | 24 | 6 | | | | | | |
| 2 | 27 | 62 | 3 | 19 | 0 | 1 | 0 | 1 | 0 | 1 | 12 | 4 | 10 | 4 | 22 | 6 | | | | | | |
| 3 | 6 | 62 | 3 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 4 | 13 | 4 | 19 | 6 | | | | | | |
| 3 | 13 | 62 | 3 | 30 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 4 | 13 | 4 | 18 | 6 | | | | | | |
| 3 | 20 | 62 | 4 | 4 | 1 | 1 | 0 | 1 | 1 | 1 | 17 | 5 | 9 | 4 | 26 | 6 | | | | | | |
| 3 | 27 | 62 | 4 | 12 | 4 | 3 | 0 | 1 | 4 | 3 | 46 | 8 | 12 | 5 | 58 | 9 | | | | | | |
| 4 | 3 | 62 | 4 | 18 | 1 | 1 | 0 | 1 | 1 | 1 | 12 | 4 | 8 | 4 | 20 | 5 | | | | | | |
| 4 | 10 | 62 | 4 | 26 | 1 | 1 | 0 | 0 | 1 | 1 | 26 | 5 | 13 | 4 | 39 | 6 | | | | | | |
| 4 | 17 | 62 | 5 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 7 | 17 | 6 | 32 | 9 | | | | | | |
| 4 | 24 | 62 | 5 | 29 | 0 | 1 | 0 | 1 | 0 | 1 | 15 | 7 | 12 | 6 | 27 | 9 | | | | | | |
| 5 | 1 | 62 | 6 | 4 | 0 | 1 | 0 | 0 | 0 | 1 | 8 | 5 | 9 | 5 | 17 | 7 | | | | | | |
| 5 | 8 | 62 | 6 | 20 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 6 | 10 | 6 | 15 | 8 | | | | | | |
| 5 | 22 | 62 | 7 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 4 | 10 | 4 | 14 | 6 | | | | | | |
| 5 | 29 | 62 | 6 | 29 | 0 | 1 | 0 | 1 | 0 | 1 | 13 | 5 | 17 | 5 | 30 | 7 | | | | | | |
| 6 | 5 | 62 | 7 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 6 | 8 | 6 | 11 | 8 | | | | | | |
| 6 | 12 | 62 | 7 | 12 | – | – | – | – | – | – | 0 | 5 | 10 | 6 | 10 | 8 | | | | | | |
| 6 | 19 | 62 | 7 | 18 | 0 | 1 | 0 | 0 | 0 | 1 | 10 | 5 | 9 | 6 | 19 | 7 | | | | | | |
| 6 | 26 | 62 | 8 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 6 | 5 | 6 | 10 | 8 | | | | | | |
| 7 | 31 | 62 | 8 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 5 | 0 | 7 | | | | | | |
| 8 | 8 | 62 | 8 | 28 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 10 | 7 | 9 | 14 | 13 | | | | | | |
| 8 | 14 | 62 | 8 | 31 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 7 | 4 | 5 | 4 | 9 | | | | | | |
| 8 | 21 | 62 | 9 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 5 | 6 | 5 | 9 | 7 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 28 | 62 | 9 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 6 | 2 | 7 | 10 | 9 | | | | | | | |
| 9 | 4 | 62 | 9 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 6 | 7 | 6 | 15 | 8 | | | | | | | |
| 9 | 11 | 62 | 10 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 7 | 5 | 12 | 7 | | | | | | | |
| 9 | 18 | 62 | 10 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 5 | 16 | 6 | 18 | 7 | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** IDAHO

**MAJOR BASIN** PACIFIC NORTHWEST

**MINOR BASIN** MIDDLE & LOWER SNAKE RIVER

**STATION LOCATION** CLEARWATER RIVER AT

LEWISTON, IDAHO 97

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 10 | 61 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 310 | | | | | | | | | | | | | | | | | | | | |
| 10 | 17 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 0 | 120 | | | | | | | | | | | | | | | | | | | | |
| 11 | 7 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 20 | 100 | | | | | | | | | | | | | | | | | | | | |
| 11 | 21 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 80 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 12 | 5 | 61 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 520 | 0 | 90 | | | | | | | | | | | | | | | | | | | | |
| 12 | 19 | 61 | 600 | 20 | 0 | 20 | 0 | 50 | 0 | 200 | 290 | 0 | 140 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 180 | 0 | 270 | | | | | | | | | | | | | | | | | | | | |
| 1 | 16 | 62 | 200 | 20 | 0 | 0 | 0 | 20 | 0 | 20 | 110 | 0 | 90 | | | | | | | | | | | | | | | | | | | | |
| 2 | 6 | 62 | 500 | 0 | 70 | 0 | 0 | 0 | 0 | 110 | 290 | 0 | 50 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 20 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 0 | 490 | | | | | | | | | | | | | | | | | | | | |
| 3 | 6 | 62 | 500 | 0 | 0 | 0 | 0 | 20 | 0 | 80 | 390 | 0 | 150 | 97 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 20 | 62 | 1400 | 0 | 0 | 0 | 40 | 40 | 0 | 60 | 1280 | 0 | 270 | 92 | 2 | 97 | 2 | | | | | | | | | | | | | | | | |
| 4 | 3 | 62 | 1000 | 0 | 20 | 0 | 0 | 60 | 0 | 80 | 790 | 0 | 270 | 84 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 4 | 17 | 62 | 800 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 830 | 0 | 250 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 8 | 62 | 700 | 0 | 20 | 0 | 0 | 20 | 0 | 0 | 620 | 0 | 80 | 14 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 22 | 62 | 500 | 0 | 0 | 20 | 20 | 0 | 0 | 130 | 380 | 40 | 300 | | | | | | | | | | | | | | | | | | | | |
| 6 | 5 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 130 | 170 | 720 | | | | | | | | | | | | | | | | | | | | |
| 6 | 19 | 62 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 320 | 40 | 590 | | | | | | | | | | | | | | | | | | | | |
| 7 | 3 | 62 | 1000 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 800 | 40 | 1350 | 97 | 1 | 73 | 1 | | | | | | | | | | | | | | | | |
| 7 | 17 | 62 | 300 | 0 | 0 | 50 | 0 | 0 | 0 | 50 | 230 | 50 | 250 | | | | | | | | | | | | | | | | | | | | |
| 8 | 8 | 62 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 250 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 8 | 21 | 62 | 400 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 330 | 0 | 120 | | | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 220 | | | | | | | | | | | | | | | | | | | | |
| 9 | 18 | 62 | 00 | 0 | 0 | 10 | 0 | 0 | 0 | 10 | 10 | 0 | 290 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 10 | 61 | | | | | | | | | | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 17 | 61 | 2 | 24 | 92 | 17 | 93 | 5 | 70 | 5 | 49 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 11 | 7 | 61 | 92 | 21 | 2 | 20 | 94 | 8 | 93 | 6 | 45 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 21 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 5 | 61 | 2 | 17 | 92 | 10 | 93 | 10 | 71 | 6 | 57 | 110 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 19 | 61 | 56 | 23 | 92 | 11 | 89 | 9 | 51 | 4 | 53 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 92 | 27 | 14 | 17 | 2 | 9 | 93 | 8 | 39 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 1 | 16 | 62 | 92 | 20 | 14 | 20 | 2 | 17 | 93 | 11 | 32 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 6 | 62 | 14 | 20 | 92 | 15 | 2 | 10 | 70 | 6 | 49 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 20 | 62 | 92 | 37 | 14 | 28 | 52 | 4 | 40 | 4 | 27 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 6 | 62 | 14 | 54 | 90 | 15 | 92 | 15 | 2 | 8 | 8 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 20 | 62 | 14 | 26 | 92 | 23 | 2 | 6 | 45 | 4 | 41 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 3 | 62 | 47 | 37 | 92 | 16 | 97 | 7 | 2 | 6 | 34 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 17 | 62 | 92 | 26 | 14 | 16 | 97 | 10 | 2 | 9 | 39 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 8 | 62 | 14 | 32 | 2 | 19 | 92 | 18 | 37 | 5 | 26 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 22 | 62 | 14 | 31 | 2 | 12 | 92 | 10 | 37 | 5 | 42 | 190 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 5 | 62 | 2 | 32 | 14 | 18 | 31 | 7 | 37 | 6 | 37 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 6 | 19 | 62 | 2 | 30 | 14 | 20 | 52 | 7 | 37 | 6 | 37 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 7 | 3 | 62 | 14 | 27 | 2 | 23 | 92 | 11 | 31 | 7 | 32 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 17 | 62 | 2 | 27 | 92 | 22 | 14 | 9 | 31 | 6 | 36 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 8 | 62 | 92 | 26 | 93 | 11 | 14 | 10 | 16 | 8 | 45 | 20 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 21 | 62 | 2 | 26 | 92 | 22 | 16 | 4 | 14 | 4 | 44 | 0 | 0 | 34 | 15 | 2 | 11 | 1 | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 9 | 4 | 62 | 2 | 20 | 14 | 17 | 92 | 17 | 97 | 6 | 40 | 0 | 0 | 10 | 16 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 18 | 62 | 2 | 24 | 92 | 11 | 16 | 9 | 14 | 6 | 50 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

MINOR BASIN MIDDLE & LOWER SNAKE RIVER

STATION LOCATION CLEARWATER RIVER AT

LEWISTON, IDAHO 97

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 10 | 61 | 13.0 | 9.4 | 7.1 | - | - | - | - | - | - | 24 | 16 | 9 | 4 | 1 | - | 60 | - |
| 10 | 17 | 61 | 13.0 | 10.2 | 7.1 | - | - | - | - | - | - | 18 | 14 | 12 | 4 | 1 | - | 58 | - |
| 10 | 24 | 61 | 9.5 | 11.4 | 6.9 | - | - | - | - | - | - | 19 | 20 | 13 | 4 | 2 | .0 | 58 | 700 |
| 10 | 31 | 61 | 8.5 | 12.4 | 6.9 | - | - | - | - | - | - | 21 | 16 | 16 | 8 | 2 | - | 60 | 510 |
| 11 | 4 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 370 |
| 11 | 7 | 61 | 6.0 | 12.8 | 6.8 | - | - | - | - | - | - | 20 | 12 | 13 | 5 | 2 | - | 55 | 240 |
| 11 | 14 | 61 | 6.0 | 13.4 | 7.0 | - | - | - | - | - | - | 22 | 14 | 11 | 4 | 2 | - | 54 | 370 |
| 11 | 21 | 61 | 3.0 | 13.8 | 7.0 | - | - | - | - | - | 7 | 27 | 16 | 10 | 4 | 2 | - | 72 | 130 |
| 11 | 28 | 61 | 3.0 | 13.6 | 6.9 | - | - | - | - | - | 2 | 25 | 16 | 9 | 3 | 2 | - | 66 | 170 |
| 12 | 5 | 61 | 6.0 | 13.0 | 7.1 | - | - | - | - | - | - | 27 | 18 | 10 | 4 | 2 | - | 85 | 2200 |
| 12 | 12 | 61 | 4.0 | 13.8 | 7.1 | - | - | - | - | - | - | 32 | 22 | 10 | 4 | 2 | - | 85 | 75 |
| 12 | 19 | 61 | 5.0 | 13.0 | 7.3 | - | 8 | - | - | - | - | 28 | 20 | 10 | 4 | 2 | - | 90 | 600 |
| 12 | 26 | 61 | 4.0 | 12.6 | 7.3 | - | - | - | - | - | 6 | 25 | 22 | 10 | 4 | 2 | .0 | 93 | 510 |
| 1 | 2 | 62 | 5.0 | 13.8 | 7.3 | - | - | - | - | - | 4 | 26 | 16 | 10 | 4 | 2 | .0 | 73 | 230 |
| 1 | 9 | 62 | 6.0 | 10.0 | 7.3 | - | - | - | - | - | - | 22 | 20 | 200 | 250 | 7 | - | 58 | 300 |
| 1 | 16 | 62 | 4.0 | 13.4 | 7.3 | - | 10 | - | - | - | - | 24 | 16 | 15 | 8 | 2 | - | 77 | 230 |
| 1 | 23 | 62 | 4.0 | 13.6 | 7.2 | - | - | - | - | - | 4 | 28 | 16 | 9 | 9 | 2 | .0 | 80 | 33 |
| 1 | 30 | 62 | 4.0 | 13.6 | 7.3 | - | - | - | - | - | 2 | 26 | 18 | 9 | 4 | 2 | .0 | 67 | 100 |
| 2 | 6 | 62 | 4.0 | 13.2 | 7.3 | - | - | - | - | - | - | 25 | 18 | 17 | 9 | 2 | - | 85 | 470 |
| 2 | 13 | 62 | 5.0 | 12.6 | 7.3 | - | 20 | - | - | - | - | 26 | 18 | 90 | 65 | 2 | - | 74 | 1200 |
| 2 | 20 | 62 | 7.0 | 12.0 | 7.2 | - | - | - | - | - | - | 28 | 20 | 27 | 18 | 4 | - | 84 | 1000 |
| 2 | 27 | 62 | 4.0 | 14.0 | 7.3 | - | - | - | - | - | - | 29 | 18 | 12 | 5 | 2 | - | 82 | - |
| 3 | 6 | 62 | 5.0 | 13.6 | 7.3 | - | - | - | - | - | - | 27 | 18 | 11 | 4 | 2 | - | 70 | 100 |
| 3 | 13 | 62 | 6.0 | 13.6 | 7.3 | - | - | - | - | - | - | 27 | 20 | 53 | 30 | 5 | - | 78 | 230 |
| 3 | 20 | 62 | 9.0 | 11.8 | 7.3 | - | 10 | - | - | - | - | 28 | 20 | 100 | 75 | 18 | - | 76 | 330 |
| 3 | 27 | 62 | 8.0 | 12.8 | 7.3 | - | - | - | - | - | 3 | 24 | 18 | 360 | 550 | 25 | .0 | 55 | 1800 |
| 4 | 3 | 62 | 9.0 | 11.6 | 7.3 | - | - | - | - | - | 2 | 24 | 18 | 58 | 38 | 7 | .0 | 54 | 500 |
| 4 | 10 | 62 | 8.0 | 12.4 | 7.3 | - | 13 | - | - | - | 3 | 19 | 16 | 57 | 32 | 6 | .0 | 55 | 230 |
| 4 | 17 | 62 | 9.0 | 12.0 | 7.3 | - | - | - | - | - | - | 15 | 14 | 34 | 20 | 5 | - | 30 | 100 |
| 4 | 24 | 62 | 10.0 | 11.4 | 7.3 | - | - | - | - | - | 4 | 17 | 9 | 28 | 16 | 4 | .0 | 26 | 120 |
| 5 | 1 | 62 | 9.0 | 11.6 | 7.2 | - | - | - | - | - | 3 | 19 | 12 | 21 | 9 | 3 | .0 | 44 | 530 |
| 5 | 8 | 62 | 8.0 | 11.6 | 7.3 | - | - | - | - | - | 3 | 16 | 18 | 22 | 8 | 3 | .0 | 36 | 600 |
| 5 | 15 | 62 | 10.0 | 11.4 | 6.9 | - | - | - | - | - | - | 15 | 10 | 18 | 7 | 2 | - | 40 | 970 |
| 5 | 22 | 62 | 10.0 | 11.8 | 7.1 | - | - | - | - | - | 3 | 15 | 10 | 20 | 10 | 2 | .0 | 51 | 330 |
| 5 | 29 | 62 | 12.0 | 12.0 | 7.0 | - | - | - | - | - | 6 | 14 | 10 | 27 | 11 | 3 | .0 | 23 | 2200 |
| 6 | 5 | 62 | 11.0 | 11.6 | 7.1 | - | - | - | - | - | 2 | 18 | 12 | 18 | 7 | 2 | - | 48 | - |
| 6 | 12 | 62 | 13.0 | 10.2 | 7.3 | - | - | - | - | - | 3 | 19 | 10 | 15 | 6 | 2 | .0 | 77 | 300 |
| 6 | 19 | 62 | 15.0 | 9.8 | 7.1 | - | - | - | - | - | 5 | 15 | 12 | 20 | 8 | 2 | .0 | 34 | 280 |
| 6 | 26 | 62 | 17.0 | 8.2 | 7.0 | - | - | - | - | - | - | 21 | 10 | 15 | 7 | 2 | - | 53 | 1000 |

NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE IDAHO
MAJOR BASIN PACIFIC NORTHWEST
MINOR BASIN MIDDLE & LOWER SNAKE RIVER
STATION LOCATION CLEARWATER RIVER AT
LEWISTON, IDAHO 97

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 700 |
| 7 | 3 | 62 | 17.0 | 8.4 | 7.1 | - | - | - | - | - | - | 19 | 10 | 18 | 6 | 2 | - | 72 | - |
| 7 | 10 | 62 | 20.0 | 7.6 | 7.1 | - | 8 | - | - | - | - | 20 | 12 | 15 | 6 | 2 | - | 67 | 300 |
| 7 | 17 | 62 | 21.0 | 7.0 | 7.1 | - | - | - | - | - | - | 25 | 20 | 15 | 5 | 4 | - | 70 | 30 |
| 7 | 24 | 62 | 23.0 | 6.0 | 7.0 | - | - | - | - | - | - | 21 | 12 | 12 | 4 | 2 | - | 65 | 30 |
| 7 | 31 | 62 | 24.0 | 6.2 | 7.0 | - | - | - | - | - | 4 | 25 | 16 | 13 | 4 | 1 | - | 63 | 300 |
| 8 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 8 | 8 | 62 | 21.0 | 6.8 | 7.0 | - | - | - | - | - | 4 | 29 | 12 | 11 | 4 | 2 | .0 | 68 | - |
| 8 | 14 | 62 | 23.0 | 6.0 | 7.0 | - | 8 | - | - | - | - | 27 | 20 | 13 | 5 | 2 | - | 68 | 200 |
| 8 | 21 | 62 | 23.0 | 5.6 | 7.1 | - | - | - | - | - | - | 28 | 16 | 11 | 4 | 2 | - | 76 | 530 |
| 8 | 28 | 62 | 20.0 | 7.2 | 7.4 | - | - | - | - | - | - | 25 | 16 | 12 | 4 | 2 | - | 54 | 400 |
| 9 | 4 | 62 | 20.0 | 6.6 | 7.1 | - | - | - | - | - | - | 31 | 20 | 12 | 4 | 1 | - | 79 | 930 |
| 9 | 11 | 62 | 17.0 | 7.6 | 7.1 | - | 13 | - | - | - | - | 34 | 30 | 15 | 4 | 5 | - | 87 | 4700 |
| 9 | 18 | 62 | 17.0 | 7.8 | 7.1 | - | - | - | - | - | - | 29 | 18 | 17 | 7 | 2 | - | 76 | 200 |
| 9 | 25 | 62 | 20.0 | 8.2 | 7.1 | - | - | - | - | - | - | 29 | 20 | 11 | 4 | 2 | - | 81 | 490 |

## STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Spalding, Idaho
Data Supplied by U.S. Geological Survey

STATE Idaho
MAJOR BASIN Pacific Northwest
MINOR BASIN Middle and Lower Snake River
STATION LOCATION Clearwater River at
Lewiston, Idaho

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.480 | 4.300 | 4.280 | 5.780 | 5.200 | 6.050 | 16.800 | 29.900 | 51.000 | 17.000 | 4.810 | 3.000 |
| 2 | 3.230 | 4.400 | 5.350 | 4.900 | 5.200 | 6.370 | 18.500 | 28.700 | 52.000 | 17.000 | 4.670 | 2.800 |
| 3 | 3.230 | 4.300 | 4.690 | 4.480 | 5.580 | 5.730 | 20.400 | 33.800 | 52.000 | 16.000 | 4.650 | 2.700 |
| 4 | 3.010 | 4.120 | 5.660 | 5.580 | 5.970 | 5.350 | 23.000 | 37.000 | 50.000 | 13.600 | 4.540 | 2.600 |
| 5 | 3.030 | 4.100 | 5.050 | 6.210 | 6.290 | 5.050 | 25.500 | 40.200 | 44.000 | 12.800 | 4.760 | 2.600 |
| 6 | 2.880 | 4.200 | 5.050 | 5.660 | 6.290 | 5.050 | 36.800 | 37.700 | 37.600 | 12.300 | 5.030 | 2.600 |
| 7 | 2.970 | 3.880 | 4.690 | 5.500 | 7.200 | 5.100 | 61.000 | 36.600 | 33.500 | 12.400 | 4.650 | 2.500 |
| 8 | 3.740 | 3.720 | 4.280 | 15.500 | 7.200 | 5.200 | 64.000 | 41.300 | 30.800 | 11.500 | 4.740 | 2.400 |
| 9 | 3.740 | 3.720 | 4.020 | 29.800 | 8.740 | 5.430 | 43.100 | 53.300 | 31.000 | 10.900 | 4.940 | 2.400 |
| 10 | 3.370 | 3.860 | 3.580 | 18.300 | 8.910 | 5.500 | 33.400 | 58.900 | 38.600 | 10.400 | 4.430 | 2.400 |
| 11 | 3.740 | 4.120 | 2.610 | 11.600 | 10.200 | 4.980 | 27.100 | 57.800 | 40.600 | 10.100 | 4.410 | 2.900 |
| 12 | 5.400 | 4.330 | 2.250 | 10.200 | 11.700 | 4.690 | 24.300 | 53.900 | 39.100 | 9.720 | 4.480 | 4.630 |
| 13 | 5.480 | 4.330 | 2.350 | 9.790 | 13.400 | 4.620 | 24.300 | 48.900 | 38.000 | 9.390 | 4.260 | 3.800 |
| 14 | 5.310 | 4.040 | 3.800 | 8.710 | 13.000 | 4.480 | 27.700 | 45.800 | 38.000 | 9.250 | 3.400 | 3.300 |
| 15 | 4.900 | 3.780 | 4.480 | 7.790 | 13.900 | 4.550 | 34.400 | 41.800 | 36.900 | 8.900 | 3.300 | 3.100 |
| 16 | 4.710 | 4.050 | 3.960 | 6.950 | 13.000 | 4.830 | 42.700 | 44.500 | 35.800 | 8.530 | 3.200 | 3.000 |
| 17 | 4.440 | 3.460 | 3.830 | 6.530 | 11.500 | 5.200 | 40.500 | 44.500 | 37.200 | 8.300 | 3.100 | 2.800 |
| 18 | 4.200 | 2.290 | 3.830 | 6.370 | 11.600 | 5.580 | 40.500 | 46.100 | 36.200 | 7.020 | 3.100 | 2.700 |
| 19 | 4.330 | 1.720 | 3.640 | 5.970 | 11.600 | 6.450 | 49.000 | 48.500 | 38.000 | 6.840 | 3.200 | 2.600 |
| 20 | 4.080 | 3.560 | 3.710 | 5.200 | 10.900 | 7.200 | 60.200 | 49.400 | 36.000 | 6.650 | 3.200 | 2.500 |
| 21 | 4.170 | 3.530 | 4.620 | 4.550 | 9.970 | 9.930 | 65.600 | 48.500 | 35.000 | 6.400 | 3.200 | 2.500 |
| 22 | 4.200 | 3.700 | 5.000 | 3.350 | 8.910 | 9.640 | 51.200 | 45.300 | 32.000 | 6.200 | 3.100 | 2.400 |
| 23 | 4.200 | 3.400 | 4.900 | 3.110 | 8.390 | 9.360 | 45.700 | 44.500 | 30.000 | 5.980 | 3.000 | 2.300 |
| 24 | 4.300 | 4.290 | 4.830 | 3.460 | 7.280 | 9.170 | 48.200 | 50.200 | 27.000 | 5.850 | 3.000 | 2.300 |
| 25 | 3.800 | 4.300 | 4.830 | 4.000 | 6.780 | 12.800 | 59.100 | 58.000 | 26.000 | 5.680 | 3.000 | 2.300 |
| 26 | 3.700 | 4.280 | 4.980 | 5.000 | 5.660 | 18.300 | 54.500 | 59.700 | 27.000 | 5.580 | 2.900 | 2.300 |
| 27 | 4.000 | 4.280 | 4.480 | 5.660 | 4.620 | 31.700 | 46.700 | 55.300 | 25.000 | 5.540 | 2.800 | 2.200 |
| 28 | 4.670 | 4.280 | 4.150 | 5.970 | 5.130 | 28.800 | 47.100 | 55.000 | 22.000 | 5.700 | 2.700 | 2.500 |
| 29 | 4.300 | 3.930 | 4.090 | 6.290 |  | 22.100 | 39.700 | 61.000 | 20.000 | 5.700 | 3.400 | 4.200 |
| 30 | 3.940 | 4.020 | 4.620 | 5.500 |  | 18.300 | 33.800 | 58.800 | 18.000 | 5.560 | 3.600 | 4.800 |
| 31 | 3.800 |  | 5.970 | 5.350 |  | 16.600 |  | 54.400 |  | 5.300 | 3.200 |  |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** TENNESSEE RIVER

**MINOR BASIN** CLINCH RIVER

**STATION LOCATION** CLINCH RIVER ABOVE

KINGSTON, TENNESSEE 106

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 3 | 2 | 62 | 4 | 27 | 1 | 1 | 0 | 1 | 1 | 1 | 15 | 4 | 122 | 7 | 137 | 8 | | | | | | |
| 3 | 2 | 62 | 7 | 19 | 2 | 4 | 0 | 3 | 2 | 5 | 13 | 10 | 108 | 9 | 121 | 13 | | | | | | |
| 3 | 14 | 62 | 4 | 20 | 1 | 1 | 0 | 1 | 1 | 1 | 44 | 6 | 134 | 7 | 178 | 9 | | | | | | |
| 3 | 28 | 62 | 4 | 27 | 0 | 1 | 0 | 1 | 0 | 1 | 13 | 4 | 409 | 10 | 422 | 11 | | | | | | |
| 4 | 4 | 62 | 4 | 30 | 0 | 0 | 0 | 1 | 0 | 1 | 50 | 5 | 1066 | 17 | 1116 | 18 | | | | | | |
| 4 | 15 | 62 | 6 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 6 | 392 | 11 | 411 | 13 | | | | | | |
| 4 | 25 | 62 | 7 | 19 | 0 | 1 | 0 | 1 | 0 | 1 | 68 | 8 | 128 | 9 | 196 | 12 | | | | | | |
| 4 | 28 | 62 | 7 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 145 | 10 | 1 | 5 | 146 | 11 | | | | | | |
| 5 | 1 | 62 | 6 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 6 | 148 | 10 | 152 | 12 | | | | | | |
| 5 | 9 | 62 | 6 | 26 | 0 | 1 | 1 | 1 | 1 | 1 | 59 | 7 | 63 | 7 | 122 | 10 | | | | | | |
| 6 | 6 | 62 | 7 | 9 | 0 | 1 | 0 | 0 | 0 | 1 | 12 | 6 | 88 | 9 | 100 | 11 | | | | | | |
| 6 | 6 | 62 | 8 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 3 | 217 | 5 | 233 | 6 | | | | | | |
| 6 | 13 | 62 | 8 | 10 | 2 | 2 | 0 | 1 | 2 | 2 | 209 | 6 | 335 | 6 | 544 | 8 | | | | | | |
| 6 | 20 | 62 | 8 | 2 | 4 | 2 | 0 | 1 | 4 | 2 | 195 | 13 | 127 | 9 | 322 | 16 | | | | | | |
| 6 | 27 | 62 | 8 | 22 | 1 | 1 | 0 | 1 | 1 | 1 | 118 | 10 | 307 | 13 | 425 | 16 | | | | | | |
| 7 | 5 | 62 | 8 | 17 | 1 | 1 | 0 | 1 | 1 | 1 | 76 | 8 | 174 | 10 | 250 | 13 | | | | | | |
| 7 | 11 | 62 | 9 | 4 | 1 | 3 | 0 | 1 | 1 | 3 | 148 | 31 | 391 | 12 | 539 | 33 | | | | | | |
| 7 | 23 | 62 | 9 | 4 | 0 | 1 | 0 | 1 | 0 | 1 | 17 | 7 | 26 | 8 | 43 | 11 | | | | | | |
| 7 | 25 | 62 | 9 | 13 | 0 | 1 | 0 | 0 | 0 | 1 | 65 | 8 | 205 | 12 | 270 | 14 | | | | | | |
| 7 | 31 | 62 | 9 | 4 | 2 | 2 | 0 | 1 | 2 | 2 | 98 | 9 | 177 | 10 | 275 | 13 | | | | | | |
| 8 | 6 | 62 | 9 | 5 | 5 | 4 | 1 | 1 | 6 | 4 | 170 | 26 | 79 | 6 | 249 | 27 | | | | | | |
| 8 | 15 | 62 | 10 | 13 | – | – | – | – | – | – | 36 | 6 | 170 | 10 | 206 | 13 | | | | | | |
| 8 | 20 | 62 | 9 | 19 | 7 | 5 | 0 | 1 | 7 | 5 | 265 | 37 | 30 | 7 | 295 | 38 | | | | | | |
| 8 | 22 | 62 | 10 | 10 | 2 | 2 | 0 | 1 | 2 | 2 | 74 | 14 | 5 | 6 | 79 | 15 | | | | | | |
| 9 | 5 | 62 | 11 | 15 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 5 | 12 | 7 | 15 | 9 | | | | | | |
| 9 | 12 | 62 | 10 | 26 | 1 | 1 | 0 | 1 | 1 | 1 | 130 | 9 | 7 | 7 | 137 | 11 | | | | | | |
| 9 | 19 | 62 | 11 | 9 | 1 | 1 | 0 | 0 | 1 | 1 | 52 | 7 | 414 | 14 | 466 | 16 | | | | | | |
| 9 | 26 | 62 | 11 | 7 | 0 | 0 | 0 | 1 | 0 | 1 | 16 | 7 | 63 | 9 | 79 | 11 | | | | | | |

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 2 | 19 | 62 | 1200 | 0 | 0 | 0 | 0 | 40 | 0 | 310 | 870 | 40 | 210 | 79 | 1 | 87 | 1 | | | | | | | | | | | | | | | | |
| 3 | 7 | 62 | 800 | 0 | 0 | 20 | 0 | 0 | 0 | 40 | 730 | 20 | 150 | 87 | 1 | 82 | 1 | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 300 | 0 | 0 | 0 | 0 | 20 | 0 | 70 | 250 | 20 | 180 | | | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 500 | 0 | 40 | 40 | 0 | 20 | 0 | 190 | 210 | 150 | 150 | | | | | | | | | | | | | | | | | | | | |
| 5 | 9 | 62 | 1100 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 930 | 0 | 80 | 82 | 2 | 87 | 2 | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 6300 | 0 | 170 | 20 | 0 | 130 | 80 | 1100 | 4770 | 250 | 2740 | 87 | 4 | 82 | 4 | 71 | 3 | 92 | 2 | 69 | 1 | | | | | | | | | | |
| 6 | 4 | 62 | 7000 | 0 | 0 | 80 | 0 | 0 | 40 | 500 | 6330 | 480 | 1880 | 87 | 5 | 82 | 4 | 92 | 1 | 69 | 1 | 88 | 1 | | | | | | | | | | |
| 6 | 20 | 62 | 2900 | 0 | 0 | 0 | 0 | 0 | 20 | 170 | 2750 | 0 | 600 | 82 | 3 | 87 | 3 | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 2400 | 0 | 0 | 20 | 20 | 60 | 0 | 190 | 2090 | 120 | 640 | 87 | 3 | 82 | 2 | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 4800 | 0 | 0 | 0 | 0 | 20 | 0 | 480 | 4260 | 120 | 330 | 87 | 4 | 82 | 4 | 68 | 1 | 69 | 1 | | | | | | | | | | | | |
| 7 | 31 | 62 | 4500 | 0 | 40 | 0 | 0 | 0 | 20 | 410 | 4020 | 170 | 660 | 87 | 4 | 82 | 4 | 81 | 1 | 68 | 1 | 69 | 1 | 88 | 1 | 85 | 1 | | | | | | |
| 8 | 14 | 62 | 19400 | 210 | 170 | 3880 | 0 | 130 | 130 | 3630 | 11270 | 3930 | 6080 | 68 | 5 | 73 | 5 | 92 | 5 | 82 | 4 | 25 | 4 | 87 | 4 | 88 | 4 | 38 | 3 | 44 | 2 | 40 | 2 |
| 8 | 28 | 62 | 3200 | 0 | 0 | 80 | 0 | 0 | 0 | 630 | 2450 | 800 | 2450 | 87 | 3 | 82 | 3 | 68 | 2 | 81 | 1 | 69 | 1 | 73 | 1 | | | | | | | | |
| 9 | 17 | 62 | 800 | 0 | 0 | 140 | 0 | 20 | 0 | 140 | 520 | 110 | 6300 | 82 | 1 | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 2 | 19 | 62 | 62 | 27 | 15 | 15 | 65 | 13 | 36 | 8 | 37 | 150 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 7 | 62 | 65 | 22 | 36 | 18 | 62 | 18 | 71 | 12 | 30 | 20 | 0 | 9 | 15 | 1 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 62 | 20 | 65 | 17 | 36 | 16 | 15 | 13 | 34 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 4 | 16 | 62 | 65 | 19 | 62 | 17 | 36 | 15 | 86 | 4 | 45 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 9 | 62 | 36 | 43 | 65 | 27 | 62 | 10 | 92 | 2 | 18 | 0 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 36 | 31 | 65 | 30 | 62 | 18 | 92 | 7 | 14 | 0 | 0 | 6 | | | | | | | | | | | 7 | 51 | 2 | | | | | 0 | 0 |
| 6 | 4 | 62 | 65 | 41 | 36 | 29 | 62 | 13 | 47 | 7 | 10 | 0 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 20 | 62 | 36 | 36 | 65 | 31 | 47 | 9 | 31 | 5 | 19 | 0 | 0 | 6 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 36 | 28 | 65 | 27 | 31 | 6 | 62 | 5 | 34 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 65 | 37 | 36 | 33 | 62 | 9 | 47 | 7 | 14 | 0 | 0 | – | | | | | | | | | | | – | | | | | | | – | – |
| 7 | 31 | 62 | 65 | 39 | 36 | 27 | 25 | 7 | 31 | 5 | 22 | 0 | 0 | 10 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 14 | 62 | 27 | 49 | 2 | 11 | 36 | 9 | 91 | 7 | 24 | 0 | 0 | 1020 | 22 | 7 | 2 | 6 | 15 | 5 | 16 | 4 | 21 | 4 | 0 | | | | | | | 0 | 0 |
| 8 | 28 | 62 | 65 | 27 | 36 | 22 | 62 | 7 | 25 | 6 | 38 | 0 | 0 | 42 | 15 | 3 | 4 | 1 | | | | | | | 6 | 50 | 2 | | | | | 1 | 0 |
| 9 | 17 | 62 | 36 | 27 | 65 | 16 | 62 | 15 | 16 | 9 | 33 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

***RESULTS IN MICROGRAMS PER LITER***
*(Parts per billion)*

**STATION LOCATION** CLINCH RIVER ABOVE
KINGSTON, TENNESSEE

106

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 5 | 9 | 62 | 6 | 13 | 8920# | 53 | 24 | 29 | 0 | 7 | 8 | 1 | 1 | 6 | 0 | 3 | 1 | 0 | 5 |
| 6 | 13 | 62 | 9 | 17 | 12120# | 76 | 26 | 50 | 1 | 5 | 9 | 1 | 0 | 7 | 1 | 4 | 2 | 0 | 5 |
| 9 | 17 | 62 | 10 | 5 | 4840 | 128 | 27 | 101 | 1 | 8 | 8 | 1 | 1 | 6 | 0 | 3 | 3 | 1 | 3 |

# ESTIMATED

**MINOR BASIN** CLINCH RIVER

**STATION LOCATION** CLINCH RIVER ABOVE

KINGSTON, TENNESSEE 106

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 1 | 31 | 62 | - | - | - | - | - | - | - | - | 4 | 96 | 112 | - | - | 18 | .0 | 116 | - |
| 2 | 6 | 62 | - | - | - | - | - | - | - | - | 4 | 94 | 148 | 5 | 60 | 15 | .0 | 120 | - |
| 2 | 9 | 62 | - | - | - | - | - | - | - | - | 3 | 92 | 140 | 5 | 225 | 14 | .1 | 127 | - |
| 2 | 12 | 62 | - | - | - | - | - | - | - | - | 4 | 92 | 140 | 5 | 725 | 15 | .0 | 131 | - |
| 3 | 11 | 62 | - | - | - | - | - | - | - | - | 4 | 24 | 102 | 5 | 0 | 20 | - | - | - |
| 3 | 21 | 62 | - | - | 7.9 | - | - | - | - | - | 8 | 72 | 88 | 10 | 25 | 24 | 1.1 | - | - |
| 3 | 28 | 62 | - | - | - | - | - | - | - | - | 12 | 82 | 116 | 5 | 0 | 24 | .0 | - | - |
| 4 | 15 | 62 | - | - | - | - | - | - | - | - | 3 | 84 | 104 | 5 | 0 | 14 | .0 | - | - |
| 4 | 25 | 62 | - | - | - | - | - | - | - | - | 5 | - | - | 5 | 25 | 15 | - | 108 | - |
| 5 | 19 | 62 | - | - | 7.6 | - | - | - | - | - | 3 | 88 | 96 | 5 | 0 | 11 | .0 | 98 | - |
| 6 | 6 | 62 | - | - | - | - | - | - | - | - | 5 | 76 | 92 | 0 | 25 | 12 | .1 | 95 | - |
| 6 | 13 | 62 | - | - | - | - | - | - | - | - | 4 | 76 | 92 | 5 | 125 | 16 | .2 | 113 | - |
| 6 | 20 | 62 | - | - | - | - | - | - | - | - | 4 | 80 | 100 | 0 | 220 | 15 | .0 | 113 | - |
| 7 | 5 | 62 | - | - | 8.1 | - | - | - | - | - | 6 | 82 | 112 | 5 | 240 | 19 | .5 | - | - |
| 7 | 11 | 62 | - | - | - | - | - | - | - | - | 5 | 88 | 100 | 5 | 290 | - | - | 120 | - |
| 8 | 13 | 62 | - | - | - | - | - | - | - | - | 7 | 84 | 100 | 0 | 62 | 20 | .1 | 130 | - |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | 5 | 96 | 100 | 5 | *25 | 13 | .0 | 130 | - |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | 2 | 88 | 104 | 0 | *25 | 12 | .0 | 133 | - |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | 5 | 96 | 116 | 5 | *25 | 10 | .0 | 127 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Scarboro, Tennessee
Operated by U.S. Geological Survey

STATE Tennessee

MAJOR BASIN Tennessee River

MINOR BASIN Clinch River

STATION LOCATION Clinch River above
Kingston, Tennessee

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.040 | 7.390 | 4.540 | 2.590 | 19.800 | 11.700 | 1.500 | 7.350 | 5.120 | 4.800 | 5.010 | 4.640 |
| 2 | 3.680 | 6.490 | 3.770 | 3.170 | 20.200 | 19.900 | 1.140 | 6.610 | 4.970 | 4.170 | 4.990 | 4.290 |
| 3 | 5.890 | 6.330 | 2.350 | 4.990 | 20.000 | 19.800 | 1.950 | 7.270 | 4.900 | 5.750 | 4.990 | 2.700 |
| 4 | 5.790 | 4.680 | 2.640 | 3.870 | 19.800 | 19.600 | 2.950 | 7.370 | 2.840 | 5.790 | 4.400 | 3.220 |
| 5 | 5.730 | 2.700 | 4.280 | 3.180 | 19.300 | 19.400 | 2.550 | 7.370 | 5.270 | 5.810 | .435 | 4.390 |
| 6 | 5.550 | 3.640 | 3.780 | 3.130 | 12.800 | 19.700 | 2.780 | 7.410 | 5.010 | 6.030 | .433 | 4.620 |
| 7 | 4.840 | 5.030 | 3.690 | 7.030 | 8.430 | 19.600 | 1.840 | 7.390 | 4.880 | 5.130 | .348 | 4.910 |
| 8 | 2.950 | 4.570 | 3.810 | 6.170 | 8.470 | 20.100 | 1.780 | 7.830 | 5.170 | 2.970 | .260 | 4.610 |
| 9 | .330 | 4.560 | 5.050 | 5.870 | 9.210 | 16.600 | 1.540 | 7.930 | 4.670 | 2.380 | .232 | 4.120 |
| 10 | .266 | 4.560 | 3.470 | 8.130 | 9.630 | 11.500 | 2.060 | 5.310 | 3.490 | 5.150 | .208 | 4.400 |
| 11 | 2.820 | 4.390 | 2.290 | 8.090 | 9.030 | 14.700 | 4.270 | 7.230 | 3.600 | 4.670 | .205 | 4.870 |
| 12 | 3.010 | 2.100 | 3.720 | 8.150 | 8.870 | 14.400 | 6.070 | 5.910 | 6.110 | 5.170 | .166 | 4.820 |
| 13 | 2.900 | 2.530 | 3.090 | 8.310 | 8.790 | 16.900 | 4.670 | 1.490 | 5.490 | 5.690 | 2.500 | 4.810 |
| 14 | 3.280 | 5.650 | 1.710 | 7.150 | 8.710 | 20.100 | 3.380 | .672 | 2.850 | 5.730 | 3.500 | 4.670 |
| 15 | 3.620 | 5.030 | 1.040 | 6.030 | 8.590 | 20.400 | 2.050 | 4.720 | 4.140 | 5.910 | 3.600 | 3.770 |
| 16 | 3.770 | 4.820 | .973 | 3.260 | 8.550 | 20.200 | 2.530 | 4.460 | 4.150 | 5.790 | 3.680 | 4.150 |
| 17 | 5.330 | 4.740 | 4.360 | 2.620 | 7.030 | 20.000 | 2.310 | 4.650 | .420 | 5.630 | 4.620 | 3.740 |
| 18 | 4.800 | 4.670 | 9.230 | 2.070 | 5.910 | 19.900 | 2.390 | 4.610 | .981 | 5.390 | 5.170 | 3.640 |
| 19 | 4.700 | 2.400 | 6.350 | 1.370 | 6.450 | 19.800 | 2.580 | 4.400 | 4.130 | 5.430 | 4.870 | 1.780 |
| 20 | 6.410 | 5.030 | 4.950 | 3.760 | 6.830 | 16.300 | 1.680 | 1.870 | 4.520 | 5.490 | 4.200 | 3.460 |
| 21 | 6.630 | 5.610 | 4.340 | 3.400 | 7.190 | 16.100 | 3.170 | 2.800 | 4.740 | 5.590 | 5.610 | 4.030 |
| 22 | 5.930 | 4.370 | 3.770 | 6.010 | 5.660 | 13.100 | 5.510 | 3.590 | 4.400 | 5.310 | 6.440 | 3.160 |
| 23 | 5.930 | 3.830 | 3.510 | 9.920 | 7.810 | 18.000 | 6.550 | 3.020 | 4.530 | 5.570 | 6.560 | 3.680 |
| 24 | 5.990 | .978 | 3.180 | 10.300 | 10.200 | 17.800 | 5.790 | 3.030 | 5.070 | 5.870 | 6.560 | 1.310 |
| 25 | 6.030 | 4.080 | .840 | 10.200 | 10.500 | 13.800 | 6.490 | 3.110 | 4.910 | 6.070 | 5.900 | 4.890 |
| 26 | 6.050 | 2.020 | .913 | 9.870 | 12.700 | 9.630 | 5.830 | 3.030 | 5.350 | 3.720 | 4.610 | 5.080 |
| 27 | 6.170 | 2.710 | 4.050 | 9.330 | 14.800 | 3.150 | 5.470 | 2.900 | 5.090 | 2.340 | 3.680 | 5.220 |
| 28 | 5.710 | 4.630 | 4.650 | 11.800 | 12.600 | 1.220 | 5.490 | 2.970 | 4.150 | 3.720 | 3.960 | 5.660 |
| 29 | 5.670 | 7.070 | 4.310 | 11.200 |  | .994 | 5.950 | 5.120 | 1.540 | 4.760 | 4.150 | 5.510 |
| 30 | 4.990 | 4.690 | 3.670 | 17.700 |  | .896 | 5.950 | 6.010 | 2.520 | 5.650 | 4.500 | 5.390 |
| 31 | 7.090 |  | 3.570 | 19.900 |  | 1.250 |  | 3.990 |  | 4.950 | 4.800 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** TENNESSEE
**MAJOR BASIN** TENNESSEE RIVER
**MINOR BASIN** CLINCH RIVER
**STATION LOCATION** CLINCH RIVER AT
CLINTON, TENNESSEE

119

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 7 | 2 | 69 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 9 | 6 | 11 | 7 | | | | | | |
| 7 | 9 | 62 | 8 | 6 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 6 | 5 | 9 | 8 | 11 | | | | | | |
| 7 | 16 | 62 | 8 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 5 | 8 | 7 | 9 | 8 | | | | | | |
| 7 | 23 | 62 | 9 | 20 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 3 | 0 | 6 | 0 | 6 | | | | | | |
| 8 | 27 | 62 | 10 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 9 | 5 | 8 | 7 | 17 | 8 | | | | | | |
| 9 | 11 | 62 | 9 | 26 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 6 | 2 | 8 | 5 | 10 | | | | | | |
| 9 | 18 | 62 | 10 | 13 | - | - | - | - | - | - | 3 | 5 | 10 | 6 | 13 | 7 | | | | | | |
| 9 | 24 | 62 | 10 | 16 | 0 | 1 | 0 | 1 | 0 | 1 | 9 | 6 | 4 | 6 | 13 | 8 | | | | | | |

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 6 | 18 | 62 | 4200 | 0 | 190 | 60 | 100 | 0 | 40 | 120 | 3640 | 20 | 210 | 82 | 5 | 87 | 2 | 17 | 1 | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 300 | 0 | 0 | 0 | 0 | 130 | 0 | 0 | 210 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 700 | 0 | 0 | 0 | 0 | 40 | 0 | 170 | 500 | 40 | 40 | 82 | 1 | 68 | 1 | | | | | | | | | | | | | | | | |
| 7 | 30 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 170 | 250 | 40 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 170 | 300 | 40 | 300 | 68 | 1 | | | | | | | | | | | | | | | | | | |
| 9 | 18 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** TENNESSEE
**MAJOR BASIN** TENNESSEE RIVER
**MINOR BASIN** CLINCH RIVER
**STATION LOCATION** CLINCH RIVER AT
CLINTON, TENNESSEE

119

| DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | NUM-BER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUM-BER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 36 | 74 | 65 | 11 | 47 | 4 | 62 | 4 | 7 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 4 | 0 |
| 36 | 28 | 65 | 21 | 25 | 12 | 31 | 8 | 31 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 1 |
| 36 | 31 | 25 | 20 | 65 | 14 | 47 | 6 | 29 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 25 | 32 | 36 | 16 | 15 | 9 | 65 | 7 | 36 | 0 | 0 | 6 | | | | | | | | | | | 0 | | | | | | | 0 | 3 |
| 15 | 15 | 36 | 15 | 2 | 8 | 65 | 8 | 54 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 65 | 17 | 16 | 14 | 36 | 12 | 2 | 9 | 48 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

**MINOR BASIN** CLINCH RIVER

**STATION LOCATION** CLINCH RIVER AT

CLINTON, TENNESSEE 119

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 2 | 62 | - | - | - | - | - | - | - | - | 3 | 92 | 104 | 5 | *25 | 13 | .0 | 150 | - |
| 7 | 9 | 62 | - | - | 7.6 | - | - | - | - | - | 4 | 92 | 60 | - | - | 12 | .0 | 125 | - |
| 7 | 16 | 62 | - | - | - | - | - | - | - | - | 3 | 88 | 104 | 0 | 25 | 12 | .0 | 103 | - |
| 7 | 23 | 62 | - | - | - | - | - | - | - | - | 5 | 56 | 96 | 0 | 25 | 16 | .0 | 98 | - |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | 3 | 94 | 116 | 0 | - | 10 | .0 | 114 | - |
| 9 | 11 | 62 | - | - | - | - | - | - | - | - | 3 | 100 | 124 | 0 | 25 | 12 | .0 | 120 | - |
| 9 | 18 | 62 | - | - | - | - | - | - | - | - | 5 | 104 | 108 | 5 | *25 | 13 | .0 | 133 | - |
| 9 | 23 | 62 | - | - | - | - | - | - | - | - | 4 | 104 | 124 | 0 | *25 | 13 | .0 | 140 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station below Norris Dam, Tennessee
Operated by U.S. Geological Survey

STATE Tennessee

MAJOR BASIN Tennessee River

MINOR BASIN Clinch River

STATION LOCATION Clinch River at
Clinton, Tennessee

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.510 | 6.430 | 4.470 | 2.110 | 18.700 | 11.200 | .082 | 7.150 | 4.950 | 4.320 | 5.190 | 4.400 |
| 2 | 5.380 | 6.260 | 1.820 | 4.440 | 19.000 | 17.400 | .082 | 6.380 | 5.020 | 5.090 | 5.230 | 2.130 |
| 3 | 5.840 | 6.280 | 1.960 | 3.510 | 19.000 | 17.600 | 2.560 | 7.200 | 2.100 | 5.770 | 5.170 | 3.170 |
| 4 | 5.630 | 2.300 | 4.300 | 2.230 | 18.900 | 17.900 | 2.000 | 7.200 | 4.870 | 5.800 | .136 | 4.630 |
| 5 | 5.610 | 3.180 | 3.790 | 2.550 | 16.000 | 18.200 | 2.740 | 7.260 | 4.870 | 5.880 | .231 | 4.660 |
| 6 | 5.380 | 5.110 | 3.410 | 3.140 | 9.490 | 18.600 | .238 | 7.280 | 4.980 | 6.040 | .055 | 4.790 |
| 7 | 3.520 | 4.700 | 4.020 | 5.700 | 7.830 | 18.900 | .090 | 7.310 | 4.730 | 2.980 | .211 | 4.630 |
| 8 | .086 | 4.470 | 4.650 | 4.920 | 8.050 | 19.000 | .090 | 8.190 | 5.150 | 1.890 | .055 | 3.960 |
| 9 | .214 | 4.530 | 2.220 | 5.480 | 8.030 | 9.820 | .090 | 7.140 | 3.240 | 4.860 | .226 | 4.130 |
| 10 | 2.570 | 4.500 | .070 | 7.470 | 8.000 | 10.800 | 1.280 | 5.470 | 3.230 | 4.970 | .052 | 5.060 |
| 11 | 2.820 | 2.110 | .070 | 7.560 | 8.080 | 12.100 | .103 | 7.130 | 5.500 | 4.730 | .218 | 4.730 |
| 12 | 2.790 | 1.170 | .074 | 7.770 | 8.110 | 13.600 | .103 | 2.330 | 5.360 | 5.680 | 1.060 | 4.810 |
| 13 | 3.020 | 5.320 | .070 | 7.770 | 8.110 | 17.000 | 2.130 | .090 | 3.200 | 5.780 | 3.700 | 4.710 |
| 14 | 3.420 | 5.720 | .070 | 6.560 | 8.080 | 19.500 | .096 | 4.420 | 3.600 | 5.890 | 3.700 | 3.490 |
| 15 | 3.120 | 4.670 | .070 | 3.160 | 8.080 | 19.400 | .118 | 4.650 | 4.840 | 5.850 | 3.720 | 3.790 |
| 16 | 5.120 | 4.470 | .070 | 1.210 | 7.370 | 19.300 | 1.890 | 4.440 | .096 | 6.130 | 4.710 | 1.290 |
| 17 | 4.710 | 4.570 | .074 | 1.900 | 6.380 | 19.300 | .601 | 4.460 | .086 | 5.590 | 5.230 | 2.600 |
| 18 | 4.450 | 2.560 | .078 | .556 | 5.480 | 19.200 | 2.280 | 4.580 | 4.480 | 5.490 | 5.200 | .688 |
| 19 | 4.930 | 2.620 | 1.930 | 3.290 | 6.160 | 17.200 | .090 | 1.600 | 4.680 | 5.570 | 4.140 | 3.930 |
| 20 | 6.660 | 6.760 | 3.360 | 2.300 | 6.460 | 13.700 | 2.090 | 1.670 | 4.550 | 5.700 | 4.850 | 3.980 |
| 21 | 6.010 | 4.750 | 2.480 | 4.630 | 5.630 | 9.520 | 4.750 | 4.200 | 4.650 | 5.300 | 6.150 | 2.830 |
| 22 | 6.030 | 4.300 | 2.750 | 5.300 | 2.970 | 12.800 | 5.340 | 2.650 | 4.600 | 5.580 | 6.460 | 3.720 |
| 23 | 6.010 | .093 | 2.840 | 7.800 | .090 | 16.800 | 5.900 | 2.690 | 5.060 | 5.920 | 6.400 | .074 |
| 24 | 6.160 | 3.770 | .070 | 7.240 | 2.460 | 15.200 | 5.810 | 2.800 | 4.160 | 6.150 | 6.430 | 5.630 |
| 25 | 5.910 | 1.790 | .070 | 7.500 | 8.110 | 10.400 | 5.360 | 2.940 | 5.490 | 5.290 | 4.250 | 5.540 |
| 26 | 6.180 | 1.720 | 3.310 | 7.660 | 8.170 | 5.580 | 5.480 | 2.810 | 5.430 | 2.180 | 3.210 | 4.870 |
| 27 | 6.230 | 3.990 | 3.720 | 3.840 | 5.200 | .082 | 5.350 | 2.090 | 4.180 | 3.420 | 3.950 | 5.790 |
| 28 | 5.610 | 5.440 | 3.830 | 5.200 | 1.550 | .082 | 5.490 | 5.020 | 1.490 | 4.910 | 3.990 | 5.430 |
| 29 | 5.600 | 6.330 | 2.810 | 10.400 |  | .082 | 5.470 | 4.980 | 1.670 | 4.960 | 4.230 | 5.300 |
| 30 | 5.350 | 4.450 | 3.250 | 17.300 |  | .082 | 6.650 | 4.660 | 5.310 | 5.760 | 4.310 | 3.900 |
| 31 | 7.230 |  | 1.860 | 18.400 |  | .082 |  | 5.060 |  | 5.140 | 4.350 |  |

**STATION LOCATION** COLORADO RIVER AT
YUMA, ARIZONA

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 12 | - | - | - | - | - | - | 3 | 27 | 50 | 50 | 53 | 57 | | | | | | |
| 10 | 9 | 61 | 10 | 18 | - | - | - | - | - | - | 0 | 28 | 1 | 51 | 1 | 58 | | | | | | |
| 11 | 6 | 61 | 11 | 17 | 2 | 9 | 4 | 14 | 6 | 17 | 46 | 79 | 94 | 95 | 140 | 124 | | | | | | |
| 11 | 13 | 61 | 11 | 22 | - | - | - | - | - | - | 46 | 49 | 87 | 75 | 133 | 90 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | - | - | - | - | - | - | 18 | 53 | 68 | 80 | 86 | 96 | | | | | | |
| 11 | 27 | 61 | 12 | 7 | 2 | 3 | 0 | 7 | 2 | 8 | 11 | 20 | 15 | 28 | 26 | 34 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | - | - | - | - | - | - | 11 | 26 | 47 | 36 | 58 | 44 | | | | | | |
| 12 | 11 | 61 | 12 | 19 | - | - | - | - | - | - | 20 | 56 | 10 | 79 | 30 | 97 | | | | | | |
| 12 | 18 | 61 | 12 | 28 | - | - | - | - | - | - | 0 | 51 | 60 | 81 | 60 | 96 | | | | | | |
| 12 | 26 | 61 | 1 | 5 | 3 | 5 | 1 | 13 | 4 | 14 | 13 | 40 | 43 | 57 | 56 | 70 | | | | | | |
| 1 | 2 | 62 | 1 | 10 | - | - | - | - | - | - | 6 | 53 | 85 | 87 | 91 | 102 | | | | | | |
| 1 | 8 | 62 | 2 | 12 | - | - | - | - | - | - | 59 | 52 | 77 | 75 | 136 | 91 | | | | | | |
| 1 | 15 | 62 | 1 | 24 | - | - | - | - | - | - | 6 | 41 | 21 | 62 | 27 | 74 | | | | | | |
| 1 | 22 | 62 | 1 | 30 | 2 | 5 | 10 | 15 | 12 | 16 | 0 | 40 | 45 | 59 | 45 | 71 | | | | | | |
| 1 | 29 | 62 | 2 | 7 | - | - | - | - | - | - | 70 | 108 | 105 | 156 | 175 | 190 | | | | | | |
| 2 | 5 | 62 | 2 | 14 | - | - | - | - | - | - | 5 | 55 | 68 | 77 | 73 | 85 | | | | | | |
| 2 | 12 | 62 | 2 | 23 | - | - | - | - | - | - | 24 | 51 | 36 | 83 | 60 | 97 | | | | | | |
| 2 | 19 | 62 | 3 | 6 | - | - | - | - | - | - | 164 | 105 | 46 | 159 | 210 | 191 | | | | | | |
| 2 | 26 | 62 | 3 | 9 | 2 | 5 | 6 | 14 | 8 | 15 | 37 | 39 | 109 | 59 | 146 | 71 | | | | | | |
| 3 | 5 | 62 | 3 | 27 | - | - | - | - | - | - | 0 | 49 | 35 | 68 | 35 | 84 | | | | | | |
| 3 | 12 | 62 | 3 | 23 | - | - | - | - | - | - | 0 | 52 | 33 | 80 | 33 | 95 | | | | | | |
| 3 | 19 | 62 | 4 | 3 | - | - | - | - | - | - | 10 | 51 | 62 | 72 | 72 | 88 | | | | | | |
| 3 | 26 | 62 | 4 | 6 | 0 | 6 | 8 | 16 | 8 | 17 | 0 | 40 | 87 | 58 | 87 | 70 | | | | | | |
| 4 | 2 | 62 | 4 | 20 | - | - | - | - | - | - | 14 | 53 | 0 | 52 | 14 | 74 | | | | | | |
| 4 | 9 | 62 | 4 | 27 | - | - | - | - | - | - | 0 | 71 | 10 | 76 | 10 | 104 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 37 | 53 | 87 | 76 | 124 | 93 | | | | | | |
| 4 | 30 | 62 | 6 | 25 | 7 | 7 | 3 | 9 | 10 | 12 | 20 | 46 | 0 | 45 | 20 | 64 | | | | | | |
| 5 | 14 | 62 | 6 | 22 | - | - | - | - | - | - | 37 | 32 | 75 | 45 | 112 | 55 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | - | - | - | - | - | - | 40 | 54 | 121 | 74 | 161 | 92 | | | | | | |
| 5 | 28 | 62 | 6 | 28 | 0 | 4 | 3 | 5 | 3 | 6 | 54 | 55 | 56 | 51 | 110 | 75 | | | | | | |
| 6 | 4 | 62 | 7 | 2 | - | - | - | - | - | - | 18 | 53 | 60 | 79 | 78 | 95 | | | | | | |
| 6 | 11 | 62 | 7 | 31 | - | - | - | - | - | - | 8 | 44 | 45 | 68 | 53 | 81 | | | | | | |
| 6 | 18 | 62 | 7 | 12 | - | - | - | - | - | - | 12 | 113 | 53 | 140 | 65 | 180 | | | | | | |
| 7 | 2 | 62 | 7 | 31 | - | - | - | - | - | - | 74 | 73 | 2 | 57 | 76 | 93 | | | | | | |
| 7 | 9 | 62 | 8 | 14 | - | - | - | - | - | - | 24 | 54 | 62 | 72 | 86 | 90 | | | | | | |
| 7 | 16 | 62 | 10 | 2 | - | - | - | - | - | - | 18 | 53 | 113 | 77 | 131 | 93 | | | | | | |
| 7 | 23 | 62 | 8 | 10 | 5 | 5 | 2 | 14 | 7 | 15 | 0 | 54 | 32 | 86 | 32 | 102 | | | | | | |
| 8 | 6 | 62 | 8 | 28 | - | - | - | - | - | - | 26 | 50 | 87 | 68 | 113 | 84 | | | | | | |
| 8 | 13 | 62 | 10 | 6 | - | - | - | - | - | - | 54 | 57 | 125 | 74 | 179 | 93 | | | | | | |
| 8 | 20 | 62 | 9 | 19 | - | - | - | - | - | - | 5 | 7 | 88 | 87 | 93 | 87 | | | | | | |
| 8 | 27 | 62 | 9 | 10 | 1 | 4 | 0 | 4 | 1 | 6 | 37 | 49 | 27 | 71 | 64 | 86 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** ARIZONA

**MAJOR BASIN** COLORADO RIVER

**MINOR BASIN** LOWER COLORADO RIVER

**STATION LOCATION** COLORADO RIVER AT
YUMA, ARIZONA

3

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 9 | 4 | 62 | 10 | 1 | - | - | - | - | - | - | 231 | 69 | 34 | 92 | 265 | 115 | | | | | | |
| 9 | 24 | 62 | 10 | 18 | 1 | 5 | 0 | 11 | 1 | 12 | 10 | 47 | 91 | 77 | 101 | 90 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** ARIZONA
**MAJOR BASIN** COLORADO RIVER
**MINOR BASIN** LOWER COLORADO RIVER
**STATION LOCATION** COLORADO RIVER AT
YUMA, ARIZONA

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 1300 | 0 | 0 | 20 | 0 | 20 | 0 | 440 | 850 | 20 | 170 | 68 | 2 | 91 | 1 | 87 | 1 | 88 | 1 | 89 | 1 | 75 | 1 | | | | | | |
| 10 | 16 | 61 | 300 | 0 | 0 | 20 | 0 | 0 | 0 | 80 | 230 | 0 | 100 | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 1200 | 20 | 0 | 20 | 0 | 20 | 0 | 150 | 970 | 0 | 60 | 92 | 1 | | | | | | | | | | | | | | | | |
| 11 | 13 | 61 | 600 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 560 | 0 | 20 | | | | | | | | | | | | | | | | | | |
| 11 | 27 | 61 | 1300 | 0 | 0 | 0 | 0 | 40 | 0 | 120 | 1140 | 0 | 250 | 75 | 2 | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 250 | 0 | 20 | | | | | | | | | | | | | | | | | | |
| 12 | 26 | 61 | 1200 | 0 | 0 | 20 | 0 | 20 | 0 | 250 | 920 | 0 | 600 | 92 | 1 | 87 | 1 | 68 | 1 | | | | | | | | | | | | |
| 1 | 2 | 62 | 800 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 690 | 0 | 250 | 92 | 1 | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 1100 | 0 | 0 | 0 | 0 | 60 | 0 | 100 | 890 | 0 | 230 | 87 | 2 | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 4400 | 0 | 0 | 0 | 20 | 20 | 0 | 290 | 4100 | 40 | 680 | 87 | 4 | 75 | 2 | 91 | 2 | 88 | 1 | | | | | | | | | | |
| 2 | 19 | 62 | 6200 | 0 | 0 | 20 | 20 | 5270 | 0 | 340 | 560 | 20 | 890 | 57 | 6 | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 1400 | 0 | 0 | 20 | 0 | 50 | 0 | 540 | 750 | 0 | 290 | 68 | 2 | 92 | 1 | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 2500 | 20 | 0 | 0 | 0 | 100 | 0 | 640 | 1760 | 20 | 310 | 68 | 2 | 88 | 2 | 81 | 1 | 87 | 1 | | | | | | | | | | |
| 4 | 16 | 62 | 2000 | 0 | 0 | 270 | 0 | 0 | 0 | 380 | 1390 | 40 | 1200 | 87 | 2 | 68 | 2 | 75 | 2 | 88 | 1 | | | | | | | | | | |
| 4 | 30 | 62 | 2500 | 0 | 0 | 270 | 0 | 0 | 80 | 440 | 1730 | 110 | 1220 | 75 | 2 | 71 | 1 | 68 | 1 | 87 | 1 | | | | | | | | | | |
| 5 | 14 | 62 | 1800 | 0 | 0 | 130 | 20 | 60 | 0 | 100 | 1510 | 20 | 170 | 75 | 1 | 88 | 1 | 81 | 1 | 87 | 1 | | | | | | | | | | |
| 6 | 4 | 62 | 900 | 0 | 0 | 290 | 0 | 160 | 0 | 20 | 410 | 0 | 200 | 38 | 1 | 57 | 1 | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 1500 | 20 | 60 | 190 | 0 | 110 | 0 | 60 | 1010 | 20 | 510 | 75 | 1 | 87 | 1 | 88 | 1 | 92 | 1 | | | | | | | | | | |
| 7 | 2 | 62 | 4200 | 20 | 0 | 640 | 20 | 150 | 60 | 390 | 2900 | 60 | 290 | 75 | 3 | 68 | 2 | 88 | 1 | 38 | 1 | 87 | 1 | 92 | 1 | 33 | 1 | | | | |
| 7 | 16 | 62 | 2200 | 0 | 0 | 320 | 0 | 0 | 0 | 720 | 1180 | 80 | 460 | 68 | 3 | 88 | 2 | 75 | 1 | 87 | 1 | | | | | | | | | | |
| 8 | 6 | 62 | 17700 | 16560 | 0 | 210 | 0 | 0 | 0 | 290 | 620 | 0 | 40 | 4 | 7 | 68 | 1 | 87 | 1 | 92 | 1 | | | | | | | | | | |
| 8 | 27 | 62 | 800 | 0 | 0 | 80 | 0 | 0 | 0 | 40 | 660 | 40 | 40 | 92 | 1 | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 600 | 50 | 0 | 140 | 0 | 0 | 0 | 0 | 340 | 90 | 110 | | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 3300 | 0 | 0 | 130 | 0 | 0 | 0 | 380 | 2830 | 0 | 930 | 92 | 3 | 88 | 3 | 83 | 2 | 87 | 2 | 68 | 1 | 76 | 1 | | | | | | |
| 9 | 24 | 62 | 800 | 30 | 0 | 180 | 0 | 0 | 0 | 80 | 530 | 10 | 180 | 87 | 1 | 88 | 1 | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** ARIZONA
**MAJOR BASIN** COLORADO RIVER
**MINOR BASIN** LOWER COLORADO RIVER
**STATION LOCATION** COLORADO RIVER AT
YUMA, ARIZONA

003

| DATE OF SAMPLE MONTH | DAY | YEAR | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) 1ST SPECIES | 1ST PERCENT | 2ND SPECIES | 2ND PERCENT | 3RD SPECIES | 3RD PERCENT | 4TH SPECIES | 4TH PERCENT | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES PROTOZOA (Identifiable) Number per ml. | ROTIFERS NUMBER PER LITER | ROTIFERS GENERA AND COUNT LEVEL (See text for Codes) 1ST GENUS | 1ST COUNT LEVEL | 2ND GENUS | 2ND COUNT LEVEL | 3RD GENUS | 3RD COUNT LEVEL | 4TH GENUS | 4TH COUNT LEVEL | 5TH GENUS | 5TH COUNT LEVEL | CRUSTACEA NUMBER PER LITER | CRUSTACEA GENERA AND COUNT LEVEL (See text for Codes) 1ST GENUS | 1ST COUNT LEVEL | 2ND GENUS | 2ND COUNT LEVEL | 3RD GENUS | 3RD COUNT LEVEL | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 2 | 61 | 11 | 67 | 87 | 6 | 75 | 6 | 6 | 5 | 16 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 10 | 16 | 61 | 7 | 14 | 94 | 8 | 26 | 7 | 87 | 6 | 65 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  | 2 | 0 |
| 11 | 6 | 61 | 94 | 22 | 7 | 20 | 75 | 6 | 65 | 6 | 46 | 0 | 0 | 4 |  |  |  |  |  |  |  |  |  |  | 6 | 50 | 1 |  |  |  |  | 0 | 0 |
| 11 | 13 | 61 | 94 | 17 | 7 | 12 | 11 | 7 | 6 | 6 | 58 | 20 | 0 | 7 |  |  |  |  |  |  |  |  |  |  | 4 | 50 | 1 |  |  |  |  | 0 | 0 |
| 11 | 27 | 61 | 7 | 25 | 11 | 8 | 6 | 8 | 92 | 6 | 53 | 0 | 0 | 2 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | 0 | 0 |
| 12 | 18 | 61 | 87 | 13 | 65 | 13 | 7 | 8 | 75 | 8 | 58 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 12 | 26 | 61 |  |  |  |  |  |  |  |  |  | 0 | 0 | 2 |  |  |  |  |  |  |  |  |  |  | 4 | 50 | 1 |  |  |  |  | 2 | 1 |
| 1 | 2 | 62 | 94 | 20 | 68 | 7 | 65 | 7 | 6 | 6 | 60 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 1 | 15 | 62 | 65 | 37 | 94 | 14 | 11 | 8 | 7 | 6 | 35 | 0 | 0 | 1 |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  | 0 | 0 |
| 2 | 5 | 62 | 46 | 26 | 65 | 16 | 7 | 9 | 87 | 7 | 42 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 3 | 50 | 1 |  |  |  |  | 2 | 0 |
| 2 | 19 | 62 | 64 | 19 | 6 | 12 | 93 | 9 | 26 | 8 | 52 | 50 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  | 0 | 0 |
| 3 | 19 | 62 | 26 | 30 | 94 | 9 | 6 | 7 | 92 | 6 | 48 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 4 | 2 | 62 | 26 | 31 | 71 | 5 | 33 | 4 | 87 | 3 | 57 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 4 | 16 | 62 | 46 | 30 | 26 | 21 | 7 | 9 | 65 | 6 | 34 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  | 0 | 0 |
| 4 | 30 | 62 | 46 | 32 | 7 | 27 | 82 | 6 | 65 | 6 | 29 | 150 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  | 1 | 1 |
| 5 | 14 | 62 | 26 | 10 | 46 | 10 | 92 | 7 | 7 | 6 | 67 | 0 | 0 | 1 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 1 | 0 |
| 6 | 4 | 62 | 26 | 14 | 7 | 10 | 92 | 9 | 65 | 7 | 60 | 0 | 0 | 1 |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  | 0 | 0 |
| 6 | 18 | 62 | 6 | 20 | 92 | 13 | 26 | 12 | 16 | 3 | 52 | 0 | 0 | 1 |  |  |  |  |  |  |  |  |  |  | 3 | 50 | 1 |  |  |  |  | 0 | 0 |
| 7 | 2 | 62 | 26 | 24 | 6 | 23 | 92 | 5 | 38 | 5 | 43 | 0 | 0 | 1 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 7 | 16 | 62 | 26 | 45 | 6 | 8 | 65 | 3 | 38 | 3 | 41 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 8 | 6 | 62 |  |  |  |  |  |  |  |  |  | 0 | 0 | 3 |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  | 0 | 0 |
| 8 | 27 | 62 | 91 | 25 | 26 | 13 | 71 | 5 | 65 | 4 | 33 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 9 | 4 | 62 | 26 | 20 | 94 | 13 | 16 | 7 | 92 | 6 | 54 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 9 | 17 | 62 | 92 | 11 | 38 | 10 | 26 | 9 | 94 | 7 | 63 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 9 | 24 | 62 | 94 | 15 | 16 | 12 | 92 | 7 | 38 | 6 | 60 | 0 | 0 | 3 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |

687-228 O-63—11

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** ARIZONA
**MAJOR BASIN** COLORADO RIVER
**MINOR BASIN** LOWER COLORADO RIVER
**STATION LOCATION** COLORADO RIVER AT YUMA, ARIZONA

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 6 | 4 | 62 | 6 | 11 | 3690 | 280 | 47 | 233 | 1 | 13 | 15 | 3 | 1 | 11 | 0 | 4 | 4 | 1 | 9 |
| 7 | 11 | 62 | 7 | 17 | 3380 | 246 | 44 | 202 | 1 | 13 | 13 | 2 | 1 | 8 | 2 | 4 | 3 | 1 | 9 |
| 8 | 7 | 62 | 8 | 14 | 5150 | 229 | 37 | 192 | 1 | 9 | 11 | 2 | 1 | 8 | 0 | 3 | 3 | 1 | 9 |
| 9 | 5 | 62 | 9 | 13 | 5065 | 151 | 24 | 127 | 1 | 6 | 9 | 1 | 1 | 7 | 0 | 3 | 1 | 1 | 3 |

NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE ARIZONA
MAJOR BASIN COLORADO RIVER
MINOR BASIN LOWER COLORADO RIVER
STATION LOCATION COLORADO RIVER AT
YUMA, ARIZONA 3

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 23.0 | - | 8.2 | - | - | - | - | - | 1200 | 216 | 984 | - | 45 | - | - | - | - |
| 10 | 9 | 61 | 18.0 | - | 8.2 | - | - | - | - | - | 1135 | 224 | 1020 | 5 | 32 | 640 | .5 | 2798 | *330 |
| 10 | 16 | 61 | 20.0 | - | 8.2 | - | - | - | - | - | 1190 | 224 | 1060 | - | - | - | - | - | - |
| 10 | 23 | 61 | 19.0 | - | 8.2 | - | - | - | - | - | 1160 | 212 | 1050 | - | 42 | - | - | - | - |
| 11 | 6 | 61 | 14.0 | 2.7 | 8.1 | - | - | - | - | - | 1250 | 240 | 1044 | 5 | 34 | 587 | .1 | 3110 | - |
| 11 | 13 | 61 | 13.0 | 10.4 | 8.2 | - | - | - | - | - | 1095 | 216 | 1012 | - | 32 | - | - | - | - |
| 11 | 20 | 61 | 14.0 | 12.0 | 8.2 | - | - | - | - | - | 1220 | 240 | 1132 | 5 | 25 | 640 | .0 | 3149 | *100 |
| 11 | 27 | 61 | 13.0 | 10.1 | 8.2 | - | - | - | - | - | 425 | 188 | 560 | 0 | 28 | 375 | .0 | 1398 | 300 |
| 12 | 4 | 61 | 14.0 | 11.6 | 8.2 | - | - | - | - | - | 305 | 188 | 472 | - | 42 | 302 | .2 | 1168 | 460 |
| 12 | 11 | 61 | 14.0 | 11.7 | 8.2 | - | - | - | - | - | 1295 | 272 | 1124 | 0 | 45 | 545 | .0 | 3256 | 300 |
| 12 | 18 | 61 | 13.0 | 11.6 | 8.2 | - | - | - | - | - | 800 | 240 | 924 | 0 | 22 | 500 | .0 | - | 230 |
| 12 | 26 | 61 | 12.0 | 12.5 | 8.1 | - | - | - | - | - | 875 | 224 | 835 | - | 29 | - | - | - | - |
| 1 | 2 | 62 | 14.0 | 12.7 | 8.2 | - | - | - | - | - | 1015 | 232 | 972 | - | 45 | - | - | - | 690 |
| 1 | 8 | 62 | 15.0 | 12.0 | 8.2 | - | - | - | - | - | 1275 | 240 | 1148 | - | 35 | 650 | .0 | 3283 | 310 |
| 1 | 15 | 62 | 11.0 | 12.5 | 8.2 | - | - | - | - | - | 1285 | 240 | 1156 | - | 32 | 650 | .0 | 3265 | 200 |
| 1 | 22 | 62 | 13.0 | 11.0 | 8.1 | - | - | - | - | - | 990 | 200 | 970 | 5 | 28 | 525 | .0 | 3022 | 100 |
| 1 | 29 | 62 | 16.0 | 10.3 | 8.2 | - | - | - | - | - | 1240 | 256 | 1300 | - | 32 | 625 | .0 | 3386 | 100 |
| 2 | 5 | 62 | 17.0 | 10.0 | 8.2 | - | - | - | - | - | 1090 | 228 | 1050 | - | 58 | 550 | .0 | 2931 | 540 |
| 2 | 12 | 62 | 19.0 | 10.7 | 8.0 | - | - | - | - | - | 1525 | 244 | 1150 | - | 18 | 625 | .0 | 3362 | 3800 |
| 2 | 19 | 62 | 16.5 | 9.7 | 8.1 | - | - | - | - | - | 1300 | 240 | 1340 | 5 | 32 | 675 | - | 2406 | *100 |
| 2 | 26 | 62 | 14.0 | 11.0 | 8.1 | - | - | - | - | - | 1070 | 228 | 1070 | 0 | - | 625 | .0 | 2885 | - |
| 3 | 5 | 62 | 16.0 | 11.1 | 8.1 | - | - | - | - | - | 1140 | 248 | 1130 | - | 30 | 575 | .1 | 2855 | *100 |
| 3 | 12 | 62 | 14.0 | 11.2 | 8.2 | - | - | - | - | - | 1035 | 204 | 1050 | 5 | 38 | 575 | .0 | 2714 | 750 |
| 3 | 19 | 62 | 16.0 | 10.5 | 8.1 | - | - | - | - | - | 835 | 212 | 930 | 5 | 30 | 525 | .0 | 2405 | *100 |
| 3 | 26 | 62 | 17.0 | 10.2 | 8.1 | - | - | - | - | - | 860 | 220 | 900 | - | 25 | - | - | - | 400 |
| 4 | 2 | 62 | 21.0 | 12.1 | 8.2 | - | - | - | - | .0 | 1130 | 232 | 990 | 5 | 24 | 625 | .0 | 2899 | *100 |
| 4 | 9 | 62 | 23.0 | - | 8.1 | - | - | - | - | - | 950 | 208 | 880 | - | 34 | 575 | .1 | 2569 | *100 |
| 4 | 16 | 62 | 27.0 | 10.6 | 8.1 | - | - | - | - | - | 950 | 204 | 840 | 10 | 31 | 550 | .0 | 2532 | *1 |
| 4 | 30 | 62 | 20.0 | 9.2 | 8.2 | - | - | - | - | - | 1025 | 224 | 990 | - | 42 | 600 | - | 2834 | 200 |
| 5 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 5 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | 550 | .0 | - | - |
| 5 | 14 | 62 | 19.0 | 9.8 | 8.0 | - | - | - | - | - | 885 | 220 | 900 | - | 45 | 512 | .0 | 2371 | 100 |
| 5 | 21 | 62 | 20.0 | 9.7 | 8.1 | - | - | - | - | - | 900 | 208 | 850 | 5 | 30 | 525 | .0 | 2470 | *100 |
| 5 | 28 | 62 | 20.0 | 9.8 | 8.0 | - | - | - | - | - | 1025 | 220 | 1005 | - | 24 | 600 | .0 | 2773 | - |
| 6 | 4 | 62 | 22.0 | 10.4 | 8.0 | - | - | - | - | - | 1150 | 220 | 1000 | - | 36 | - | - | - | 200 |
| 6 | 11 | 62 | 24.0 | 8.7 | 8.1 | - | - | - | - | - | 1050 | 220 | 950 | 5 | 21 | - | .0 | 2944 | 700 |
| 6 | 18 | 62 | 24.0 | 8.8 | 8.0 | - | - | - | - | - | 970 | 228 | 900 | 5 | 36 | 675 | .0 | 2615 | 200 |
| 7 | 2 | 62 | 26.0 | 8.2 | 8.2 | - | - | - | - | - | 775 | 196 | 810 | 5 | 42 | 450 | .0 | 2268 | - |
| 7 | 9 | 62 | 27.5 | 8.1 | 8.2 | - | - | - | - | - | 750 | 196 | 700 | 0 | 35 | 500 | .0 | 2120 | 300 |

**MINOR BASIN** LOWER COLORADO RIVER

**STATION LOCATION** COLORADO RIVER AT
YUMA, ARIZONA

| DATE OF SAMPLE MONTH | DATE OF SAMPLE DAY | DATE OF SAMPLE YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIF per 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 16 | 62 | 25.5 | 8.1 | 8.2 | - | - | - | - | - | - | 192 | 760 | 0 | 48 | 475 | .0 | 2230 | * |
| 7 | 23 | 62 | 28.5 | 7.8 | 8.1 | - | - | - | - | - | 775 | 200 | 800 | 5 | 46 | 450 | .0 | 2183 | |
| 8 | 6 | 62 | 26.5 | 8.2 | 8.1 | - | - | - | - | - | 825 | 188 | 830 | 5 | 45 | 500 | .0 | 2250 | * |
| 8 | 13 | 62 | 29.0 | 7.8 | 8.0 | - | - | - | - | - | 725 | 188 | 710 | 5 | - | 500 | .0 | 2165 | |
| 8 | 20 | 62 | 28.0 | - | 8.2 | - | - | - | - | - | 690 | 186 | 760 | 0 | 32 | 525 | .0 | 2200 | |
| 8 | 27 | 62 | 27.5 | 7.8 | 8.1 | - | - | - | - | - | 860 | 196 | 870 | 5 | 50 | 575 | .0 | 2490 | |
| 9 | 4 | 62 | 27.0 | 8.9 | 8.2 | - | - | - | - | - | 990 | 264 | 910 | 5 | 57 | 475 | .0 | 2720 | |
| 9 | 10 | 62 | 25.0 | 9.4 | 8.1 | - | - | - | - | - | 890 | 212 | 800 | - | 52 | - | - | - | |
| 9 | 17 | 62 | 26.0 | 8.8 | 8.2 | - | - | - | - | - | 990 | 176 | 950 | - | 58 | - | - | - | * |
| 9 | 24 | 62 | 26.0 | 10.2 | 8.1 | - | - | - | - | - | 990 | 224 | 930 | 0 | 52 | 625 | .0 | 2730 | |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station below Yuma, Arizona
Operated by U.S. Geological Survey

STATE Arizona
MAJOR BASIN Colorado River
MINOR BASIN Lower Colorado River
STATION LOCATION Colorado River at
Yuma, Arizona

| October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.060 | .933 | 1.230 | 1.180 | .888 | .946 | .996 | 1.120 | .940 | 1.370 | 1.380 | 1.470 |
| .960 | .937 | 1.240 | .737 | .869 | .906 | 1.010 | 1.130 | .933 | 1.350 | 1.340 | 1.390 |
| .902 | .942 | 1.700 | .715 | .864 | .977 | 1.000 | 1.070 | .993 | 1.280 | 1.410 | 1.300 |
| .900 | .931 | 1.190 | 2.020 | .862 | 1.050 | 1.040 | 1.080 | .967 | 1.320 | 1.420 | 1.520 |
| .959 | .959 | .684 | 1.990 | 1.180 | .956 | 1.060 | 1.440 | 1.030 | 1.350 | 1.380 | 1.800 |
| .878 | .921 | .701 | .942 | .901 | .917 | 1.060 | 1.490 | 1.020 | 1.360 | 1.360 | 1.790 |
| .899 | .909 | .729 | .847 | .813 | .903 | 1.370 | 1.390 | .930 | 1.320 | 1.340 | 1.700 |
| .972 | 1.100 | .658 | .824 | .912 | .948 | 1.430 | 1.280 | .980 | 1.350 | 1.370 | 1.330 |
| .974 | .998 | .735 | .829 | .839 | .919 | 1.400 | 1.250 | .926 | 1.390 | 1.390 | 1.170 |
| .912 | .943 | .836 | .792 | 1.120 | .940 | 1.380 | 1.250 | 1.060 | 1.360 | 1.390 | 1.420 |
| .947 | .936 | .872 | .793 | .845 | 1.040 | 1.300 | 1.220 | 1.060 | 1.320 | 1.490 | 1.350 |
| .910 | .922 | .782 | 1.880 | .855 | 1.360 | 1.420 | 1.260 | 1.010 | 1.300 | 1.460 | 1.430 |
| .976 | .984 | .826 | .877 | .825 | 1.180 | 1.460 | 1.270 | .955 | 1.300 | 1.460 | 1.300 |
| 1.080 | 1.050 | .923 | .825 | .823 | 1.220 | 1.440 | 1.290 | .945 | 1.400 | 1.420 | 1.160 |
| 1.110 | 1.000 | 1.750 | .813 | .804 | 1.290 | 1.430 | 1.260 | 1.000 | 1.450 | 1.270 | 1.300 |
| .976 | .939 | 1.130 | .814 | .800 | 1.320 | 1.430 | 1.900 | 1.060 | 1.420 | 1.320 | 1.320 |
| .932 | .901 | 1.080 | .893 | .805 | 1.320 | 1.410 | 2.280 | 1.100 | 1.370 | 1.360 | 1.290 |
| .935 | .834 | .862 | .916 | .847 | 1.330 | 1.430 | 2.150 | 1.290 | 1.340 | 1.440 | 1.480 |
| .959 | .885 | .817 | .886 | .871 | 1.270 | 1.410 | 1.400 | 1.340 | 1.330 | 1.530 | 1.950 |
| .940 | .877 | .767 | .957 | .877 | 1.290 | 1.410 | 1.340 | 1.350 | 1.350 | 1.510 | 1.690 |
| .900 | .861 | .763 | .998 | .929 | 1.340 | 1.410 | 1.260 | 1.370 | 1.440 | 1.460 | 1.350 |
| .929 | .867 | 1.390 | .937 | 1.000 | 1.320 | 1.450 | 1.190 | 1.510 | 1.330 | 1.540 | 1.220 |
| .949 | .930 | 1.550 | .931 | 1.340 | 1.290 | 1.480 | 1.110 | 1.360 | 1.300 | 1.420 | 1.210 |
| .968 | .902 | 1.420 | 1.020 | 1.640 | 1.270 | 1.390 | .990 | 1.390 | 1.300 | 1.210 | 1.270 |
| .954 | 1.020 | 1.580 | 1.030 | 1.030 | 1.410 | 1.420 | 1.010 | 1.370 | 1.280 | 1.160 | 1.440 |
| 1.040 | 1.480 | 1.550 | .924 | 1.050 | 1.300 | 1.450 | 1.040 | 1.370 | 1.340 | 1.150 | 1.910 |
| 1.020 | 1.470 | 1.050 | .861 | .961 | 1.170 | 1.410 | 1.040 | 1.360 | 1.390 | 1.130 | 1.680 |
| .998 | .901 | .735 | .880 | .933 | 1.130 | 1.430 | 1.050 | 1.360 | 1.390 | 1.170 | 1.160 |
| 1.000 | .667 | .783 | .883 |  | 1.220 | 1.160 | 1.080 | 1.360 | 1.410 | 1.080 | 1.000 |
| .897 | 1.210 | .861 | .887 |  | .933 | 1.070 | 1.060 | 1.350 | 1.350 | 1.170 | 1.120 |
| .909 |  | .766 | .904 |  | .970 |  | .974 |  | 1.360 | 1.690 |  |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** CALIFORNIA

**MAJOR BASIN** COLORADO RIVER

**MINOR BASIN** LOWER COLORADO RIVER

**STATION LOCATION** COLORADO RIVER ABOVE
PARKER DAM, ARIZONA-CALIFORNIA 4

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | TOTAL | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 4 | 61 | 400 | 0 | 0 | 70 | 0 | 20 | 50 | 50 | 220 | 0 | 110 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 100 | 0 | 0 | 0 | 0 | 60 | 0 | 0 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 400 | 0 | 0 | 80 | 0 | 100 | 0 | 20 | 150 | 0 | 100 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 800 | 90 | 0 | 320 | 0 | 0 | 20 | 50 | 340 | 0 | 180 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 400 | 0 | 50 | 0 | 0 | 0 | 0 | 90 | 230 | 20 | 20 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 200 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 180 | 0 | 110 | | | | | | | | | | | | | | | | | | | | |
| 1 | 14 | 62 | 500 | 0 | 0 | 0 | 0 | 20 | 0 | 50 | 410 | 0 | 70 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 600 | 90 | 0 | 0 | 0 | 0 | 50 | 340 | 90 | 50 | 20 | 68 | 2 | | | | | | | | | | | | | | | | | | |
| 2 | 21 | 62 | 600 | 20 | 0 | 150 | 0 | 20 | 60 | 190 | 150 | 40 | 20 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 300 | 0 | 0 | 60 | 0 | 0 | 60 | 40 | 150 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 200 | 0 | 0 | 20 | 0 | 100 | 20 | 20 | 60 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 500 | 0 | 0 | 190 | 0 | 0 | 20 | 230 | 40 | 40 | 40 | 68 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 600 | 0 | 0 | 420 | 0 | 0 | 60 | 20 | 60 | 20 | 40 | | | | | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 600 | 0 | 0 | 210 | 0 | 230 | 0 | 110 | 60 | 110 | 210 | | | | | | | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 1200 | 80 | 0 | 540 | 0 | 0 | 100 | 100 | 330 | 40 | 120 | 32 | 1 | 76 | 1 | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 700 | 40 | 0 | 40 | 0 | 0 | 0 | 40 | 550 | 40 | 170 | 76 | 2 | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 1100 | 0 | 0 | 270 | 0 | 0 | 60 | 210 | 590 | 40 | 170 | 76 | 2 | 71 | 1 | | | | | | | | | | | | | | | | |
| 8 | 7 | 62 | 400 | 0 | 0 | 170 | 0 | 100 | 0 | 80 | 80 | 0 | 40 | 33 | 1 | | | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 1500 | 0 | 0 | 60 | 0 | 0 | 0 | 170 | 1270 | 0 | 300 | 76 | 3 | 92 | 1 | 68 | 1 | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 1000 | 0 | 0 | 190 | 0 | 0 | 80 | 40 | 720 | 0 | 0 | 92 | 2 | 76 | 1 | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 200 | 0 | 0 | 70 | 0 | 0 | 20 | 90 | 0 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | PROTOZOA (Identifiable) Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 4 | 61 | 8 | 59 | 91 | 12 | 26 | 6 | 70 | 4 | 19 | 0 | 0 | 89 | 17 | 4 | 18 | 1 | | | | | | | 16 | 50 | 2 | 76 | 1 | | | 0 | 0 |
| 10 | 16 | 61 | | | | | | | | | | 0 | 0 | 19 | 17 | 2 | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 8 | 44 | 94 | 8 | 69 | 4 | 52 | 4 | 40 | 0 | 0 | 20 | 17 | 2 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 8 | 43 | 91 | 21 | 94 | 6 | 69 | 6 | 24 | 160 | 0 | 68 | 17 | 4 | 22 | 1 | 11 | 1 | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | | | | | | | | | | 50 | 0 | 28 | 17 | 2 | 11 | 1 | | | | | | | 2 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | | | | | | | | | | 0 | 20 | 23 | 17 | 2 | 11 | 1 | | | | | | | 1 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | | | | | | | | | | 20 | 0 | 16 | 17 | 1 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 1 | 14 | 62 | 91 | 65 | 8 | 6 | 69 | 5 | 25 | 5 | 19 | 0 | 0 | 12 | 17 | 1 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 25 | 94 | 91 | 2 | 89 | 2 | 92 | 1 | 1 | 0 | 0 | 3 | | | | | | | | | | | 4 | 50 | 1 | | | | | 1 | 0 |
| 2 | 21 | 62 | | | | | | | | | | 150 | 0 | 5 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | | | | | | | | | | 0 | 0 | 4 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | | | | | | | | | | 0 | 0 | 4 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 81 | 16 | 89 | 17 | 8 | 14 | 69 | 7 | 46 | 0 | 0 | 1 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 89 | 35 | 91 | 17 | 8 | 15 | 25 | 12 | 21 | 0 | 0 | 13 | 17 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | | | | | | | | | | 40 | 0 | 9 | 11 | 1 | | | | | | | | | 4 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | | | | | | | | | | 320 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | | | | | | | | | | 0 | 0 | 4 | | | | | | | | | | | 4 | 50 | 1 | | | | | 0 | 0 |
| 6 | 18 | 62 | 8 | 34 | 91 | 27 | 74 | 10 | 92 | 10 | 19 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 8 | 68 | 89 | 26 | 65 | 2 | 47 | 1 | 3 | 0 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 7 | 16 | 62 | 8 | 68 | 91 | 10 | 94 | 5 | 84 | 4 | 13 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 7 | 62 | | | | | | | | | | 0 | 0 | 78 | 18 | 4 | 17 | 3 | | | | | | | 8 | 50 | 1 | | | | | — | — |
| 8 | 20 | 62 | 91 | 48 | 8 | 19 | 26 | 4 | 3 | 2 | 27 | 0 | 0 | 81 | 17 | 4 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 91 | 75 | 8 | 12 | 26 | 5 | 2 | 2 | 6 | 0 | 0 | 17 | 17 | 2 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 8 | 43 | 91 | 28 | 23 | 9 | 84 | 4 | 16 | 160 | 0 | 136 | 17 | 4 | 9 | 4 | 22 | 1 | | | | | 6 | 50 | 2 | | | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** CALIFORNIA

**MAJOR BASIN** COLORADO RIVER

**MINOR BASIN** LOWER COLORADO RIVER

**STATION LOCATION** COLORADO RIVER ABOVE
PARKER DAM, ARIZONA-CALIFORNIA

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 4 | 61 | 11 | 1 | 0 | 2 | 10 | 6 | 10 | 6 | 4 | 17 | 23 | 21 | 27 | 27 | | | | | | |
| 10 | 11 | 61 | 10 | 27 | 0 | 2 | 2 | 3 | 2 | 4 | 2 | 17 | 22 | 20 | 24 | 26 | | | | | | |
| 10 | 18 | 61 | 11 | 1 | 0 | 2 | 1 | 3 | 1 | 4 | 4 | 16 | 20 | 19 | 24 | 25 | | | | | | |
| 11 | 6 | 61 | 11 | 21 | 0 | 1 | 12 | 5 | 12 | 5 | 1 | 9 | 31 | 13 | 32 | 16 | | | | | | |
| 11 | 13 | 61 | 11 | 28 | 0 | 1 | 9 | 6 | 9 | 6 | 1 | 8 | 40 | 13 | 41 | 15 | | | | | | |
| 11 | 21 | 61 | 12 | 1 | 0 | 1 | 8 | 5 | 8 | 5 | 5 | 8 | 30 | 13 | 35 | 15 | | | | | | |
| 12 | 4 | 61 | 12 | 14 | 0 | 1 | 6 | 4 | 6 | 4 | 3 | 8 | 23 | 13 | 26 | 15 | | | | | | |
| 12 | 11 | 61 | 12 | 28 | 0 | 2 | 5 | 5 | 5 | 5 | 0 | 15 | 17 | 21 | 17 | 26 | | | | | | |
| 12 | 18 | 61 | 1 | 3 | 0 | 2 | 6 | 5 | 6 | 5 | 15 | 16 | 34 | 20 | 49 | 26 | | | | | | |
| 1 | 2 | 62 | 1 | 15 | 0 | 1 | 9 | 6 | 9 | 6 | 0 | 11 | 16 | 16 | 16 | 19 | | | | | | |
| 1 | 14 | 62 | 1 | 31 | 1 | 2 | 5 | 5 | 6 | 5 | 13 | 17 | 32 | 21 | 45 | 27 | | | | | | |
| 2 | 5 | 62 | 2 | 19 | 0 | 2 | 10 | 6 | 10 | 6 | 26 | 15 | 42 | 21 | 68 | 26 | | | | | | |
| 2 | 21 | 62 | 3 | 9 | 0 | 2 | 8 | 6 | 8 | 6 | 26 | 17 | 36 | 21 | 62 | 27 | | | | | | |
| 3 | 5 | 62 | 3 | 20 | 1 | 2 | 4 | 5 | 5 | 5 | 11 | 16 | 89 | 22 | 100 | 27 | | | | | | |
| 3 | 19 | 62 | 4 | 3 | 0 | 1 | 5 | 4 | 5 | 4 | 2 | 15 | 29 | 20 | 31 | 25 | | | | | | |
| 4 | 2 | 62 | 4 | 20 | 0 | 1 | 5 | 4 | 5 | 4 | 0 | 37 | 13 | 21 | 13 | 43 | | | | | | |
| 5 | 7 | 62 | 7 | 11 | 0 | 2 | 5 | 6 | 5 | 6 | 6 | 21 | 27 | 30 | 33 | 37 | | | | | | |
| 5 | 21 | 62 | 6 | 27 | 1 | 2 | 8 | 5 | 9 | 5 | 4 | 22 | 10 | 22 | 14 | 31 | | | | | | |
| 6 | 4 | 62 | 7 | 5 | 1 | 2 | 11 | 6 | 12 | 6 | 3 | 22 | 39 | 30 | 42 | 37 | | | | | | |
| 6 | 18 | 62 | 7 | 17 | 0 | 2 | 8 | 5 | 8 | 5 | 0 | 47 | 17 | 26 | 17 | 54 | | | | | | |
| 7 | 2 | 62 | 7 | 30 | 0 | 2 | 11 | 5 | 11 | 5 | 3 | 20 | 2 | 25 | 5 | 32 | | | | | | |
| 7 | 16 | 62 | 8 | 8 | 0 | 2 | 6 | 6 | 6 | 6 | 10 | 26 | 22 | 34 | 32 | 43 | | | | | | |
| 8 | 7 | 62 | 10 | 12 | 1 | 2 | 11 | 5 | 12 | 5 | 24 | 21 | 30 | 27 | 54 | 34 | | | | | | |
| 8 | 20 | 62 | 9 | 7 | 0 | 2 | 9 | 6 | 9 | 6 | 1 | 19 | 13 | 26 | 14 | 32 | | | | | | |
| 9 | 4 | 62 | 9 | 24 | 0 | 2 | 1 | 3 | 1 | 4 | 25 | 25 | 49 | 34 | 74 | 42 | | | | | | |
| 9 | 17 | 62 | 10 | 10 | 0 | 1 | 11 | 6 | 11 | 6 | 11 | 23 | 18 | 33 | 29 | 40 | | | | | | |

**RESULTS IN MICROGRAMS PER LITER**
*(Parts per billion)*

**MINOR BASIN** LOWER COLORADO RIVER

**STATION LOCATION** COLORADO RIVER ABOVE
PARKER DAM, ARIZONA-CALIFORNIA 4

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 26 | 61 | 11 | 4 | 5628 | 181 | 47 | 134 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 2 | 61 | 12 | 13 | 5510 | 171 | 67 | 104 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 2 | 61 | | * | 11138 | 176 | 57 | 119 | 6 | 15 | 12 | 1 | 0 | 10 | 1 | 5 | 6 | 1 | 12 |
| 1 | 18 | 62 | 1 | 26 | 5150 | 144 | 49 | 95 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 2 | 62 | 3 | 9 | 5215 | 125 | 38 | 87 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 2 | 62 | | * | 10365 | 134 | 43 | 91 | 2 | 12 | 10 | 1 | 1 | 8 | 0 | 4 | 4 | 1 | 10 |
| 4 | 12 | 62 | 4 | 20 | 5312 | 140 | 49 | 91 | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 24 | 62 | 6 | 1 | 5435 | 129 | 53 | 76 | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 24 | 62 | | * | 10747 | 134 | 51 | 83 | 2 | 14 | 11 | 1 | 0 | 9 | 1 | 5 | 5 | 1 | 13 |
| 7 | 8 | 62 | 7 | 16 | 5222 | 134 | 50 | 84 | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 22 | 62 | 8 | 31 | 6352 | 121 | 39 | 82 | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 22 | 62 | | * | 11574 | 127 | 44 | 83 | 1 | 12 | 12 | 0 | 2 | 10 | 0 | 5 | 4 | 1 | 9 |
| 9 | 29 | 62 | 10 | 7 | 5250 | 142 | 24* | 118 | - | - | - | - | - | - | - | - | - | - | - |

* NOT SEPARATED - FILTER RECEIVED LATE

## NATIONAL WATER QUALITY NETWORK

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** CALIFORNIA

**MAJOR BASIN** COLORADO RIVER

**MINOR BASIN** LOWER COLORADO RIVER

**STATION LOCATION** COLORADO RIVER ABOVE
PARKER DAM, ARIZONA-CALIFORNIA 4

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 4 | 61 | – | – | 7.8 | – | – | – | – | – | 86 | 124 | 276 | 5 | 0 | 300 | – | 669 | – |
| 10 | 11 | 61 | – | – | 7.5 | – | – | – | – | – | 85 | 120 | 332 | 5 | 0 | 290 | .1 | – | – |
| 10 | 18 | 61 | 23.3 | – | 8.1 | – | – | – | – | – | 86 | 120 | 316 | 5 | *25 | 305 | .1 | 687 | – |
| 11 | 6 | 61 | 18.3 | – | 8.0 | – | – | – | – | – | 94 | 120 | 324 | 0 | 0 | 300 | .0 | – | – |
| 11 | 13 | 61 | – | – | 7.9 | – | – | – | – | – | 88 | 122 | 312 | 5 | *25 | 305 | .1 | 657 | – |
| 11 | 21 | 61 | 8.0 | – | – | – | – | – | – | – | 85 | 120 | 312 | 5 | – | 305 | .2 | 688 | – |
| 12 | 4 | 61 | 13.9 | – | – | – | – | – | – | – | 87 | 120 | 332 | – | *25 | 285 | .0 | 691 | – |
| 12 | 11 | 61 | 12.8 | – | – | – | – | – | – | – | 85 | 114 | – | 5 | 0 | 277 | .1 | 701 | – |
| 12 | 13 | 61 | – | – | – | – | 6 | – | – | – | – | – | – | – | – | – | – | – | – |
| 12 | 18 | 61 | 11.7 | – | – | – | – | – | – | – | 85 | 124 | 320 | – | – | 260 | .1 | 680 | – |
| 1 | 2 | 62 | 11.1 | – | – | – | – | – | – | – | 86 | 120 | 348 | – | – | 280 | – | – | – |
| 1 | 14 | 62 | 9.4 | – | – | – | – | – | – | – | 87 | 124 | 332 | – | *25 | 275 | – | 886 | – |
| 1 | 26 | 62 | – | – | – | – | 6 | – | – | – | – | – | – | – | – | – | – | – | – |
| 2 | 5 | 62 | 11.1 | – | – | – | – | – | – | – | 82 | 120 | 324 | – | – | 285 | .0 | 706 | – |
| 2 | 21 | 62 | – | – | – | – | – | – | – | – | – | – | 320 | 5 | 0 | 325 | .0 | 673 | – |
| 2 | 29 | 62 | 11.7 | – | – | – | – | – | – | – | 96 | 110 | – | – | – | – | – | – | – |
| 3 | 5 | 62 | 13.3 | – | – | – | – | – | – | – | 82 | 80 | 328 | 5 | – | 265 | .1 | 672 | – |
| 3 | 9 | 62 | – | – | – | – | 0 | – | – | – | – | – | – | – | – | – | – | – | – |
| 3 | 19 | 62 | 12.8 | – | – | – | – | – | – | – | 86 | 148 | 356 | 5 | – | 320 | – | 745 | – |
| 4 | 2 | 62 | 16.1 | – | – | – | – | – | – | – | 87 | 144 | 332 | 5 | – | 280 | .0 | 690 | – |
| 4 | 20 | 62 | – | – | – | – | 13 | – | – | – | – | – | – | – | – | – | – | – | – |
| 4 | 30 | 62 | 22.2 | – | – | – | – | – | – | – | 99 | 115 | – | – | – | – | – | – | – |
| 5 | 7 | 62 | – | – | – | – | – | – | – | – | – | – | 284 | – | 0 | 260 | .0 | 689 | – |
| 5 | 21 | 62 | 22.8 | – | – | – | – | – | – | – | 97 | 109 | 316 | 5 | *25 | – | .0 | – | – |
| 6 | 4 | 62 | 23.3 | – | – | – | – | – | – | – | 100 | 109 | 332 | 5 | *25 | 290 | .0 | 738 | – |
| 6 | 18 | 62 | 26.1 | – | – | – | – | – | – | – | 98 | 111 | – | – | – | – | – | – | – |
| 7 | 2 | 62 | 28.3 | – | – | – | – | – | – | – | 97 | 109 | – | – | – | – | – | – | – |
| 7 | 16 | 62 | – | – | – | – | 18 | – | – | – | – | – | 344 | 5 | *25 | 315 | .0 | 740 | – |
| 8 | 7 | 62 | 30.0 | – | 8.2 | – | – | – | – | – | – | – | 312 | 0 | *25 | 310 | .0 | 745 | – |
| 8 | 20 | 62 | 26.1 | – | – | – | 4 | – | – | – | – | – | – | 0 | *25 | 290 | .0 | 735 | – |
| 9 | 4 | 62 | 27.2 | – | 8.0 | – | – | – | – | – | – | – | 304 | 0 | *25 | 255 | .0 | 727 | – |
| 9 | 17 | 62 | 27.8 | – | – | – | – | – | – | – | – | – | 316 | 0 | *25 | 290 | .0 | 695 | – |

PROVISIONAL--SUBJECT TO REVISION

Gaging Station below Parker Dam
Operated by U.S. Geological Survey

| | |
|---|---|
| MINOR BASIN | Lower Colorado River |
| STATION LOCATION | Colorado River above<br>Parker Dam, Arizona-California |

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7.760 | 5.230 | 4.820 | 4.200 | 3.820 | 9.080 | 13.200 | 11.300 | 11.700 | 13.200 | 14.500 | 11.100 |
| 2 | 9.350 | 5.400 | 4.020 | 4.700 | 4.450 | 10.200 | 13.400 | 10.900 | 12.000 | 13.200 | 13.500 | 11.500 |
| 3 | 8.360 | 5.790 | 3.760 | 4.940 | 4.080 | 9.930 | 13.300 | 9.760 | 12.300 | 13.400 | 13.600 | 11.600 |
| 4 | 7.520 | 5.630 | 4.580 | 4.580 | 3.950 | 10.200 | 13.300 | 9.990 | 12.200 | 13.500 | 13.800 | 11.000 |
| 5 | 7.440 | 5.290 | 4.390 | 5.400 | 5.180 | 10.500 | 12.800 | 10.300 | 12.700 | 13.300 | 14.000 | 10.400 |
| 6 | 7.510 | 4.880 | 4.080 | 5.540 | 5.510 | 9.390 | 13.900 | 10.300 | 12.700 | 14.200 | 15.000 | 10.400 |
| 7 | 8.000 | 4.940 | 3.360 | 5.700 | 5.580 | 8.920 | 14.000 | 11.200 | 11.500 | 14.800 | 14.800 | 11.300 |
| 8 | 8.010 | 5.510 | 3.560 | 5.660 | 3.880 | 8.960 | 14.100 | 11.600 | 12.500 | 14.600 | 14.500 | 10.700 |
| 9 | 8.210 | 5.400 | 3.220 | 5.510 | 3.150 | 10.800 | 14.000 | 11.200 | 12.500 | 14.400 | 14.300 | 10.900 |
| 10 | 7.880 | 5.630 | 4.140 | 6.200 | 5.590 | 10.600 | 13.800 | 10.800 | 12.600 | 14.400 | 14.000 | 11.700 |
| 11 | 8.040 | 5.510 | 3.880 | 6.120 | 6.300 | 11.000 | 13.200 | 12.000 | 13.000 | 14.800 | 13.900 | 11.100 |
| 12 | 6.650 | 5.460 | 3.950 | 6.080 | 6.170 | 11.100 | 13.000 | 12.300 | 13.000 | 14.300 | 14.400 | 11.600 |
| 13 | 7.090 | 5.350 | 3.690 | 7.460 | 6.010 | 11.000 | 13.700 | 11.100 | 13.300 | 14.000 | 14.400 | 10.900 |
| 14 | 6.920 | 5.680 | 3.020 | 5.550 | 6.390 | 11.200 | 13.800 | 11.600 | 12.500 | 14.100 | 15.000 | 11.100 |
| 15 | 7.160 | 5.790 | 2.580 | 7.170 | 6.280 | 11.200 | 13.600 | 11.900 | 12.100 | 13.400 | 14.500 | 11.100 |
| 16 | 7.340 | 5.290 | 2.430 | 8.260 | 6.690 | 11.800 | 14.000 | 11.100 | 12.400 | 15.000 | 14.200 | 11.400 |
| 17 | 6.930 | 5.570 | 2.580 | 7.730 | 6.950 | 12.600 | 13.500 | 10.100 | 12.700 | 15.300 | 14.200 | 12.000 |
| 18 | 7.330 | 5.900 | 2.580 | 7.730 | 6.920 | 12.200 | 12.600 | 10.100 | 13.100 | 14.900 | 13.300 | 11.800 |
| 19 | 5.970 | 6.230 | 2.270 | 7.220 | 7.770 | 12.100 | 11.800 | 10.300 | 13.400 | 13.800 | 13.000 | 11.500 |
| 20 | 5.070 | 6.060 | 2.190 | 6.680 | 7.930 | 10.500 | 11.600 | 10.500 | 13.600 | 14.800 | 13.100 | 11.000 |
| 21 | 5.170 | 5.510 | 2.120 | 6.200 | 8.930 | 9.990 | 11.200 | 10.800 | 13.100 | 15.000 | 12.400 | 11.200 |
| 22 | 5.170 | 5.290 | 2.040 | 5.550 | 9.190 | 10.600 | 11.500 | 11.500 | 15.000 | 14.400 | 12.500 | 11.200 |
| 23 | 5.000 | 4.940 | 2.190 | 4.900 | 9.650 | 12.000 | 12.000 | 11.300 | 14.000 | 14.800 | 12.300 | 11.400 |
| 24 | 4.700 | 6.170 | 2.350 | 4.550 | 9.450 | 12.100 | 11.800 | 11.300 | 14.500 | 14.900 | 13.400 | 11.300 |
| 25 | 4.140 | 4.510 | 2.430 | 3.100 | 9.650 | 12.100 | 11.300 | 12.200 | 14.500 | 14.600 | 12.800 | 10.500 |
| 26 | 4.640 | 5.290 | 3.020 | 5.700 | 9.500 | 12.000 | 10.500 | 11.600 | 14.900 | 14.500 | 12.200 | 9.840 |
| 27 | 6.430 | 5.230 | 2.950 | 3.050 | 9.700 | 13.300 | 12.100 | 11.900 | 14.600 | 14.600 | 11.500 | 9.510 |
| 28 | 6.530 | 4.820 | 2.810 | 3.140 | 9.700 | 13.800 | 11.600 | 11.700 | 13.400 | 15.000 | 12.000 | 8.050 |
| 29 | 6.430 | 5.230 | 3.820 | 3.050 | | 13.100 | 11.600 | 12.100 | 13.300 | 14.600 | 11.100 | 8.520 |
| 30 | 5.290 | 4.390 | 4.510 | 3.080 | | 13.200 | 11.200 | 11.800 | 13.400 | 14.300 | 10.500 | 9.310 |
| 31 | 5.350 | | 4.390 | 3.500 | | 13.200 | | 11.300 | | 14.500 | 11.200 | |

# RADIOACTIVITY DETERMINATIONS

**STATION LOCATION** COLORADO RIVER NEAR
BOULDER CITY, NEVADA

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 3 | 61 | 10 | 16 | 0 | 2 | 10 | 5 | 10 | 5 | 11 | 17 | 42 | 21 | 53 | 27 | | | | | | |
| 10 | 10 | 61 | 10 | 30 | 0 | 2 | 2 | 4 | 2 | 4 | 6 | 18 | 33 | 23 | 39 | 29 | | | | | | |
| 10 | 17 | 61 | 10 | 31 | 0 | 2 | 7 | 5 | 7 | 5 | 6 | 16 | 40 | 21 | 46 | 26 | | | | | | |
| 10 | 24 | 61 | 11 | 6 | 0 | 2 | 11 | 5 | 11 | 5 | 1 | 22 | 5 | 25 | 6 | 33 | | | | | | |
| 10 | 31 | 61 | 11 | 13 | 0 | 2 | 1 | 4 | 1 | 4 | 13 | 16 | 20 | 21 | 33 | 26 | | | | | | |
| 11 | 7 | 61 | 11 | 17 | 1 | 1 | 12 | 6 | 13 | 6 | 12 | 6 | 8 | 21 | 20 | 22 | | | | | | |
| 11 | 14 | 61 | 11 | 29 | 0 | 1 | 7 | 5 | 7 | 5 | 5 | 8 | 15 | 13 | 20 | 15 | | | | | | |
| 11 | 21 | 61 | 12 | 5 | 0 | 1 | 9 | 5 | 9 | 5 | 3 | 8 | 18 | 12 | 21 | 14 | | | | | | |
| 11 | 28 | 61 | 12 | 7 | 0 | 1 | 8 | 5 | 8 | 5 | 7 | 8 | 13 | 12 | 20 | 14 | | | | | | |
| 12 | 5 | 61 | 12 | 14 | 0 | 1 | 8 | 4 | 8 | 4 | 1 | 8 | 20 | 13 | 21 | 15 | | | | | | |
| 12 | 12 | 61 | 1 | 10 | 0 | 1 | 3 | 2 | 3 | 2 | 11 | 8 | 14 | 12 | 25 | 14 | | | | | | |
| 12 | 19 | 61 | 1 | 2 | 0 | 1 | 12 | 5 | 12 | 5 | 4 | 8 | 30 | 13 | 34 | 15 | | | | | | |
| 12 | 26 | 61 | 1 | 10 | 1 | 2 | 7 | 4 | 8 | 4 | 3 | 16 | 22 | 20 | 25 | 26 | | | | | | |
| 1 | 2 | 62 | 1 | 12 | 0 | 2 | 6 | 5 | 6 | 5 | 2 | 16 | 5 | 19 | 7 | 25 | | | | | | |
| 1 | 9 | 62 | 1 | 19 | 0 | 2 | 6 | 5 | 6 | 5 | 0 | 16 | 18 | 20 | 18 | 26 | | | | | | |
| 1 | 16 | 62 | 1 | 29 | 1 | 2 | 11 | 5 | 12 | 5 | 6 | 16 | 40 | 22 | 46 | 27 | | | | | | |
| 1 | 23 | 62 | 2 | 6 | 0 | 2 | 5 | 5 | 5 | 5 | 10 | 16 | 18 | 21 | 28 | 26 | | | | | | |
| 1 | 30 | 62 | 2 | 14 | 0 | 2 | 8 | 5 | 8 | 5 | 25 | 16 | 33 | 20 | 58 | 26 | | | | | | |
| 2 | 6 | 62 | 2 | 16 | 0 | 1 | 11 | 5 | 11 | 5 | 0 | 7 | 17 | 12 | 17 | 14 | | | | | | |
| 2 | 13 | 62 | 3 | 1 | 0 | 3 | 8 | 7 | 8 | 8 | 8 | 19 | 28 | 25 | 36 | 31 | | | | | | |
| 2 | 20 | 62 | 3 | 7 | 1 | 2 | 3 | 4 | 4 | 4 | 6 | 16 | 31 | 20 | 37 | 26 | | | | | | |
| 2 | 27 | 62 | 3 | 12 | 0 | 2 | 11 | 6 | 11 | 7 | 6 | 16 | 25 | 21 | 31 | 26 | | | | | | |
| 3 | 6 | 62 | 3 | 19 | 0 | 2 | 6 | 5 | 6 | 5 | 7 | 15 | 46 | 21 | 53 | 26 | | | | | | |
| 3 | 20 | 62 | 4 | 3 | 1 | 2 | 7 | 4 | 8 | 4 | 12 | 15 | 16 | 19 | 28 | 24 | | | | | | |
| 3 | 27 | 62 | 4 | 16 | 1 | 2 | 9 | 5 | 10 | 5 | 0 | 15 | 33 | 20 | 33 | 25 | | | | | | |
| 4 | 3 | 62 | 4 | 17 | 0 | 2 | 9 | 5 | 9 | 5 | 0 | 20 | 1 | 20 | 1 | 28 | | | | | | |
| 4 | 10 | 62 | 4 | 25 | 0 | 1 | 4 | 5 | 4 | 5 | 5 | 16 | 24 | 21 | 29 | 26 | | | | | | |
| 4 | 17 | 62 | 4 | 30 | 0 | 2 | 8 | 5 | 8 | 5 | 9 | 16 | 30 | 21 | 39 | 26 | | | | | | |
| 4 | 24 | 62 | 5 | 29 | 0 | 2 | 4 | 4 | 4 | 4 | 17 | 20 | 46 | 26 | 63 | 33 | | | | | | |
| 5 | 1 | 62 | 7 | 26 | 0 | 2 | 1 | 5 | 1 | 5 | 3 | 21 | 33 | 30 | 36 | 37 | | | | | | |
| 5 | 8 | 62 | 6 | 12 | 0 | 2 | 6 | 5 | 6 | 5 | 7 | 25 | 11 | 34 | 18 | 42 | | | | | | |
| 5 | 15 | 62 | 6 | 25 | 0 | 2 | 6 | 6 | 6 | 6 | 6 | 26 | 49 | 34 | 55 | 43 | | | | | | |
| 5 | 22 | 62 | 6 | 27 | 0 | 1 | 7 | 5 | 7 | 5 | 14 | 17 | 44 | 23 | 58 | 29 | | | | | | |
| 5 | 27 | 62 | 7 | 3 | 0 | 2 | 9 | 5 | 9 | 5 | 18 | 20 | 49 | 26 | 67 | 33 | | | | | | |
| 6 | 4 | 62 | 7 | 6 | 0 | 2 | 6 | 6 | 6 | 6 | 0 | 50 | 20 | 28 | 20 | 57 | | | | | | |
| 6 | 12 | 62 | 7 | 19 | 0 | 2 | 9 | 6 | 9 | 6 | 7 | 20 | 16 | 28 | 23 | 34 | | | | | | |
| 6 | 26 | 62 | 7 | 24 | 0 | 1 | 6 | 4 | 6 | 4 | 10 | 21 | 28 | 27 | 38 | 34 | | | | | | |
| 7 | 3 | 62 | 10 | 14 | 0 | 2 | 7 | 5 | 7 | 5 | 3 | 22 | 24 | 28 | 27 | 36 | | | | | | |
| 7 | 8 | 62 | 8 | 7 | 0 | 2 | 3 | 4 | 3 | 4 | 0 | 53 | 38 | 28 | 38 | 60 | | | | | | |
| 7 | 17 | 62 | 8 | 3 | 0 | 1 | 8 | 5 | 8 | 5 | 14 | 18 | 20 | 23 | 34 | 29 | | | | | | |

## NATIONAL WATER QUALITY NETWORK

# RADIOACTIVITY DETERMINATIONS

**STATE** NEVADA

**MAJOR BASIN** COLORADO RIVER

**MINOR BASIN** LOWER COLORADO RIVER

**STATION LOCATION** COLORADO RIVER NEAR
BOULDER CITY, NEVADA 5

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 7 | 24 | 62 | 9 | 12 | 0 | 2 | 12 | 6 | 12 | 6 | 0 | 25 | 19 | 31 | 19 | 36 | | | | | | |
| 7 | 31 | 62 | 9 | 19 | 0 | 1 | 1 | 5 | 1 | 5 | 28 | 26 | 40 | 35 | 68 | 44 | | | | | | |
| 8 | 7 | 62 | 8 | 29 | 0 | 3 | 7 | 6 | 7 | 7 | 12 | 20 | 14 | 26 | 26 | 33 | | | | | | |
| 8 | 14 | 62 | 8 | 31 | 0 | 2 | 4 | 5 | 4 | 5 | 11 | 21 | 26 | 27 | 37 | 34 | | | | | | |
| 8 | 21 | 62 | 9 | 12 | 0 | 2 | 4 | 5 | 4 | 5 | 44 | 26 | 70 | 34 | 114 | 43 | | | | | | |
| 9 | 4 | 62 | 9 | 19 | 0 | 1 | 10 | 5 | 10 | 5 | 12 | 19 | 30 | 27 | 42 | 33 | | | | | | |
| 9 | 25 | 62 | 10 | 23 | 0 | 1 | 6 | 4 | 6 | 4 | 2 | 20 | 27 | 27 | 29 | 34 | | | | | | |

**STATION LOCATION** COLORADO RIVER NEAR
BOULDER CITY, NEVADA

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE - GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 100 | 0 | 0 | 20 | 0 | 0 | 0 | 40 | 40 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 00 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 2 | 61 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 20 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 200 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 450 | 50 | 860 | 92 | 1 | 76 | 1 | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 200 | 50 | 0 | 0 | 0 | 20 | 20 | 50 | 90 | 0 | 90 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 1100 | 20 | 20 | 50 | 0 | 250 | 0 | 380 | 360 | 0 | 20 | 92 | 1 | 51 | 1 | 71 | 1 | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 200 | 0 | 0 | 40 | 0 | 0 | 0 | 120 | 80 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 300 | 0 | 0 | 40 | 0 | 20 | 0 | 120 | 80 | 20 | 80 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 300 | 0 | 0 | 20 | 0 | 20 | 20 | 100 | 170 | 0 | 40 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 300 | 60 | 0 | 0 | 0 | 0 | 0 | 150 | 40 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 500 | 460 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 100 | 0 | 0 | 20 | 0 | 0 | 0 | 50 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 00 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 200 | 0 | 0 | 0 | 0 | 80 | 0 | 40 | 40 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 100 | 0 | 0 | 60 | 0 | 20 | 0 | 20 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 100 | 20 | 0 | 20 | 0 | 0 | 0 | 20 | 20 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 200 | 0 | 0 | 60 | 0 | 40 | 0 | 0 | 80 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 400 | 0 | 0 | 0 | 0 | 40 | 0 | 120 | 210 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 200 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 120 | 0 | 80 | | | | | | | | | | | | | | | | | | | | |
| 9 | 24 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | |
| 10 | 2 | 61 | | | | | | | | | | 40 |
| 10 | 16 | 61 | | | | | | | | | | 0 |
| 11 | 2 | 61 | | | | | | | | | | 0 |
| 11 | 20 | 61 | | | | | | | | | | 0 |
| 12 | 4 | 61 | | | | | | | | | | 0 |
| 12 | 18 | 61 | | | | | | | | | | 90 |
| 1 | 2 | 62 | | | | | | | | | | 0 |
| 1 | 15 | 62 | | | | | | | | | | 0 |
| 2 | 5 | 62 | 89 | 36 | 80 | 28 | 26 | 17 | 8 | 5 | 14 | 110 |
| 2 | 19 | 62 | 89 | 55 | 26 | 20 | 47 | 16 | 9 | 3 | 6 | 0 |
| 3 | 5 | 62 | | | | | | | | | | 60 |
| 3 | 19 | 62 | 82 | 15 | 91 | 10 | 89 | 8 | 80 | 5 | 62 | 0 |
| 4 | 2 | 62 | 89 | 90 | | | | | | | | 0 |
| 4 | 16 | 62 | 89 | 90 | 82 | 5 | | | | | 5 | 40 |
| 5 | 7 | 62 | | | | | | | | | | 0 |
| 5 | 21 | 62 | | | | | | | | | | 0 |
| 6 | 4 | 62 | | | | | | | | | | 0 |
| 6 | 18 | 62 | | | | | | | | | | 0 |
| 7 | 2 | 62 | | | | | | | | | | 0 |
| 7 | 16 | 62 | | | | | | | | | | 20 |
| 8 | 6 | 62 | | | | | | | | | | 0 |
| 8 | 20 | 62 | 8 | 60 | 91 | 9 | 26 | 5 | 80 | 4 | 22 | 0 |
| 9 | 4 | 62 | | | | | | | | | | 0 |
| 9 | 24 | 62 | | | | | | | | | | 0 |

| DATE OF SAMPLE | | | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 3 | 0 |
| 11 | 2 | 61 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 12 | 18 | 61 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 10 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 0 | 0 | | | | | | | | | | | 4 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 0 | 6 | 2 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 24 | 62 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

***RESULTS IN MICROGRAMS PER LITER***
*(Parts per billion)*

**STATION LOCATION** COLORADO RIVER NEAR
BOULDER CITY, NEVADA

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES |
| 11 | 2 | 61 | 11 | 24 | 5392 | 187 | 39 | 148 | 2 | 12 | 13 | 1 | 1 | 11 | 0 | 3 | 3 | 1 |
| 12 | 26 | 61 | 1 | 19 | 3845 | 212 | 37 | 175 | - | - | - | - | - | - | - | - | - | - |
| 2 | 12 | 62 | 3 | 8 | 4551 | 226 | 55 | 171 | - | - | - | - | - | - | - | - | - | - |
| 2 | 12 | 62 | | * | 8396 | 220 | 47 | 173 | 2 | 13 | 10 | 1 | 0 | 9 | 0 | 5 | 4 | 1 |
| 3 | 27 | 62 | 4 | 10 | 5251 | 162 | 52 | 110 | - | - | - | - | - | - | - | - | - | - |
| 5 | 3 | 62 | 5 | 18 | 4718 | 205 | 65 | 140 | - | - | - | - | - | - | - | - | - | - |
| 6 | 11 | 62 | 6 | 23 | 5132 | 147 | 49 | 98 | - | - | - | - | - | - | - | - | - | - |
| 6 | 11 | 62 | | * | 15101 | 171 | 55 | 116 | 1 | 15 | 13 | 1 | 1 | 9 | 2 | 5 | 6 | 1 |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** NEVADA

**MAJOR BASIN** COLORADO RIVER

**MINOR BASIN** LOWER COLORADO RIVER

**STATION LOCATION** COLORADO RIVER NEAR
BOULDER CITY, NEVADA 5

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 3 | 61 | 16.0 | 5.7 | 8.0 | - | - | 6.8 | 8.6 | - | 76 | 126 | 324 | - | - | 206 | - | - | 3 |
| 10 | 10 | 61 | 16.0 | 8.9 | 8.0 | - | - | 6.7 | 8.6 | - | 74 | 126 | 326 | - | - | 212 | - | - | 33 |
| 10 | 17 | 61 | 16.0 | 5.7 | 8.0 | - | - | 6.7 | 8.5 | - | 76 | 124 | 322 | - | - | 212 | - | - | 33 |
| 10 | 24 | 61 | 16.0 | 5.6 | 8.0 | - | - | 6.7 | 8.5 | - | 76 | 128 | 326 | - | - | 216 | - | - | 3 |
| 10 | 31 | 61 | 16.0 | 6.1 | 8.0 | - | - | 6.6 | 8.5 | - | 76 | 124 | 324 | - | - | 212 | - | - | *3 |
| 11 | 2 | 61 | - | - | - | - | 12 | - | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 7 | 61 | 15.5 | 10.4 | 7.9 | - | - | 6.8 | 8.7 | .0 | 76 | 126 | 318 | 0 | 0 | 219 | .0 | 666 | *3 |
| 11 | 14 | 61 | 15.0 | 5.2 | 8.0 | - | - | 6.9 | 8.3 | - | 78 | 126 | 326 | 5 | 25 | 213 | .1 | 464 | *30 |
| 11 | 21 | 61 | 14.0 | 8.9 | 8.0 | - | - | 6.9 | 8.8 | - | 76 | 124 | 324 | 0 | 0 | 218 | - | 574 | 13 |
| 11 | 28 | 61 | 14.0 | 9.8 | 8.0 | - | - | 6.9 | 8.8 | - | 76 | 124 | 324 | - | - | 207 | .0 | 655 | *3 |
| 12 | 5 | 61 | 14.0 | 8.4 | 8.0 | - | - | 6.9 | 8.8 | - | 78 | 120 | 324 | 5 | - | 218 | .0 | 678 | 39 |
| 12 | 12 | 61 | 12.5 | 8.5 | 8.0 | - | - | 6.9 | 8.8 | - | 78 | 122 | 332 | - | - | 217 | - | - | *3 |
| 12 | 19 | 61 | 13.0 | 7.0 | 7.9 | - | - | 6.8 | 8.8 | - | 78 | 124 | 322 | - | - | 219 | - | - | 3 |
| 12 | 26 | 61 | 13.0 | 6.8 | 7.9 | - | 14 | 6.9 | 8.8 | - | 76 | 124 | 328 | - | - | 229 | - | - | 7 |
| 1 | 2 | 62 | 13.5 | 5.6 | 7.9 | - | - | 6.8 | 8.9 | - | 80 | 112 | 324 | - | - | 230 | - | 600 | 10 |
| 1 | 9 | 62 | 13.5 | 5.6 | 7.9 | - | - | 6.8 | 8.9 | - | 78 | 122 | 338 | - | - | 233 | .0 | 670 | *3 |
| 1 | 16 | 62 | 13.0 | 10.0 | 8.0 | - | - | 6.8 | 8.8 | - | 80 | 126 | 326 | - | - | 219 | - | - | 7 |
| 1 | 23 | 62 | 11.5 | 8.6 | 7.9 | - | - | 6.8 | 8.8 | - | 84 | 132 | 340 | - | 0 | 218 | .0 | 668 | 3 |
| 1 | 30 | 62 | 13.0 | 8.6 | 8.0 | - | - | 6.8 | 8.8 | - | 80 | 132 | 328 | 5 | *25 | 217 | .0 | 656 | 3 |
| 2 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | .1 | 610 | - |
| 2 | 6 | 62 | 13.0 | 13.2 | 8.0 | - | - | 6.7 | 8.7 | - | 84 | 130 | 328 | 5 | - | 228 | .0 | 676 | 20 |
| 2 | 12 | 62 | - | - | - | - | 11 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 13 | 62 | 13.0 | 14.7 | 8.1 | - | - | 6.6 | 8.7 | - | 84 | 136 | 336 | 0 | - | 225 | .0 | 732 | *3 |
| 2 | 20 | 62 | 13.0 | 16.5 | 8.0 | - | - | 6.6 | 8.5 | - | 84 | 134 | 342 | - | - | 232 | - | - | 67 |
| 2 | 27 | 62 | 12.5 | 16.4 | 8.1 | - | - | 6.4 | 8.4 | - | 86 | 134 | 346 | 5 | - | 229 | .1 | 749 | *3 |
| 3 | 6 | 62 | 13.0 | 20.9 | 8.1 | - | - | 6.4 | 8.3 | .0 | 84 | 134 | 346 | 5 | *25 | 226 | .1 | 732 | *3 |
| 3 | 20 | 62 | 12.5 | 22.0 | 8.1 | - | - | 6.2 | 8.2 | - | 84 | 132 | 340 | 5 | - | 236 | .0 | 699 | *3 |
| 3 | 27 | 62 | 13.0 | 27.2 | 8.1 | - | 4 | 6.0 | 8.0 | - | 76 | 134 | 342 | 5 | - | 241 | .0 | 647 | *3 |
| 4 | 3 | 62 | 13.5 | 20.8 | 8.1 | - | - | 5.7 | 7.7 | - | 84 | 128 | 342 | 5 | - | 240 | .0 | 748 | *3 |
| 4 | 10 | 62 | 14.0 | - | 8.1 | - | - | 5.4 | 8.9 | - | 84 | 128 | 336 | - | - | 249 | - | - | *3 |
| 4 | 17 | 62 | 14.5 | 9.1 | 8.1 | - | - | 8.7 | 10.8 | - | 86 | 132 | 338 | 10 | - | 252 | .0 | - | *3 |
| 4 | 24 | 62 | 14.5 | 9.1 | 8.0 | - | - | 6.9 | 10.7 | - | 84 | 134 | 344 | 5 | - | 242 | - | 766 | *3 |
| 5 | 1 | 62 | 14.0 | 9.0 | 8.0 | - | - | 7.0 | 8.9 | - | 82 | 130 | 338 | 5 | - | 230 | .0 | 709 | *3 |
| 5 | 3 | 62 | - | - | - | - | 13 | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 8 | 62 | 15.0 | 9.2 | 8.0 | - | - | 7.0 | 9.0 | - | 84 | 130 | 346 | - | - | 225 | - | - | *3 |
| 5 | 15 | 62 | 14.5 | 9.0 | 8.0 | - | - | 7.0 | 9.0 | - | 86 | 130 | 344 | - | - | 226 | - | - | *3 |
| 5 | 22 | 62 | 14.5 | 9.0 | 8.0 | - | - | 7.0 | 9.0 | - | 86 | 130 | 346 | - | - | 225 | - | - | *33 |
| 5 | 29 | 62 | 14.5 | 9.2 | 8.0 | - | - | 9.0 | 10.8 | - | 86 | 128 | 348 | - | - | 222 | - | - | 1000 |
| 6 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | 15 | - | - | .0 | 666 | - |

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** NEVADA
**MAJOR BASIN** COLORADO RIVER
**MINOR BASIN** LOWER COLORADO RIVER
**STATION LOCATION** COLORADO RIVER NEAR
BOULDER CITY, NEVADA

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 5 | 62 | 15.0 | 8.9 | 8.0 | - | - | 9.0 | 11.0 | - | 86 | 130 | 352 | - | - | 231 | - | - | 8000 |
| 6 | 11 | 62 | - | - | - | - | 60 | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | .0 | 720 | - |
| 6 | 19 | 62 | 15.0 | 9.0 | 7.9 | - | - | 10.8 | 13.0 | - | 82 | 128 | 344 | - | - | 235 | - | - | 790 |
| 6 | 26 | 62 | 14.0 | 9.1 | 8.1 | - | - | 9.0 | 13.0 | - | 84 | 130 | 342 | - | - | 232 | - | - | *3 |
| 7 | 3 | 62 | 14.0 | 8.9 | 8.0 | - | - | 9.0 | 11.0 | - | 84 | 130 | 344 | 10 | - | 232 | .0 | 718 | *3 |
| 7 | 10 | 62 | 13.5 | 9.0 | 8.0 | - | - | 9.0 | 13.0 | - | 86 | 130 | 320 | 5 | 25 | 229 | .0 | 710 | *3 |
| 7 | 17 | 62 | 13.5 | 8.9 | 8.0 | - | - | 8.9 | 12.9 | - | 84 | 128 | 336 | 5 | 25 | 234 | .0 | 708 | *3 |
| 7 | 24 | 62 | 14.0 | 9.1 | 8.0 | - | - | 9.0 | - | - | 86 | 130 | 330 | 5 | 25 | 232 | .0 | 735 | *3 |
| 7 | 31 | 62 | 14.0 | 8.8 | 8.1 | - | - | 12.7 | 14.7 | - | 84 | 134 | 332 | 5 | *25 | 277 | .0 | 730 | *30 |
| 8 | 7 | 62 | 14.0 | 9.0 | 8.0 | - | - | 10.8 | 14.8 | - | 82 | 132 | 338 | 5 | 25 | 214 | .0 | 679 | 5 |
| 8 | 14 | 62 | 14.0 | 8.9 | 8.1 | - | - | 10.9 | 14.8 | - | 84 | 134 | 340 | 5 | 25 | 204 | .0 | 720 | 3 |
| 8 | 21 | 62 | 13.5 | 9.2 | 8.0 | - | - | 10.8 | 14.8 | - | 84 | 130 | 340 | 0 | - | 182 | .0 | 694 | 30 |
| 9 | 4 | 62 | 14.0 | 9.3 | 8.1 | - | - | 10.8 | 13.0 | .0 | 84 | 130 | 334 | 5 | 25 | 210 | .0 | 705 | *3 |
| 9 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 9 | 25 | 62 | 14.0 | 9.8 | 8.1 | - | - | 10.9 | 12.9 | - | 82 | 128 | 338 | - | - | 222 | - | - | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station below Hoover Dam
Data furnished by U.S. Bureau of Reclamation
through U.S. Geological Survey

STATE Nevada
MAJOR BASIN Colorado River
MINOR BASIN Lower Colorado River
STATION LOCATION Colorado River near Boulder City, Nevada

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.040 | 8.120 | 8.180 | 3.900 | 8.430 | 13.300 | 11.200 | 17.500 | 16.900 | 8.790 | 14.800 | 12.000 |
| 2 | 10.600 | 7.940 | 7.350 | 6.360 | 7.620 | 12.200 | 16.000 | 16.900 | 11.600 | 14.200 | 16.000 | 7.800 |
| 3 | 10.900 | 7.700 | 4.680 | 7.070 | 5.880 | 9.360 | 17.800 | 16.500 | 6.620 | 13.000 | 15.800 | 7.880 |
| 4 | 11.200 | 7.260 | 7.040 | 6.540 | 4.460 | 8.590 | 18.000 | 16.200 | 13.000 | 5.610 | 12.400 | 16.100 |
| 5 | 10.900 | 4.900 | 8.540 | 6.510 | 10.600 | 11.900 | 17.600 | 13.900 | 14.100 | 12.700 | 9.700 | 15.100 |
| 6 | 10.500 | 8.670 | 9.500 | 6.480 | 11.300 | 12.500 | 18.100 | 8.660 | 14.800 | 12.200 | 16.300 | 14.500 |
| 7 | 8.780 | 9.250 | 11.200 | 5.000 | 13.100 | 13.000 | 12.600 | 15.500 | 15.300 | 11.500 | 16.800 | 14.700 |
| 8 | 5.660 | 9.950 | 10.900 | 7.710 | 13.300 | 13.400 | 12.000 | 14.500 | 15.000 | 7.130 | 16.100 | 11.400 |
| 9 | 9.340 | 9.150 | 10.100 | 7.730 | 10.400 | 16.600 | 17.600 | 14.400 | 11.300 | 13.700 | 16.800 | 6.800 |
| 10 | 10.400 | 9.230 | 5.610 | 9.660 | 7.200 | 10.800 | 16.100 | 14.000 | 8.510 | 14.300 | 14.800 | 13.500 |
| 11 | 9.330 | 6.760 | 10.700 | 12.100 | 3.210 | 9.670 | 16.200 | 13.800 | 15.400 | 13.800 | 13.100 | 13.900 |
| 12 | 10.500 | 4.840 | 11.200 | 11.800 | 6.140 | 14.100 | 17.800 | 9.590 | 15.200 | 13.400 | 9.820 | 14.500 |
| 13 | 12.500 | 10.700 | 10.100 | 6.890 | 7.060 | 15.200 | 18.000 | 5.720 | 14.600 | 13.200 | 16.000 | 13.700 |
| 14 | 11.500 | 10.500 | 10.900 | 5.890 | 8.980 | 15.200 | 13.300 | 15.700 | 14.100 | 11.300 | 15.600 | 13.600 |
| 15 | 6.770 | 10.700 | 8.140 | 10.600 | 10.800 | 15.000 | 8.320 | 15.300 | 13.800 | 8.140 | 15.100 | 9.650 |
| 16 | 13.300 | 11.500 | 5.880 | 9.470 | 9.570 | 13.400 | 16.200 | 15.500 | 9.800 | 15.200 | 15.100 | 6.000 |
| 17 | 8.460 | 10.700 | 3.940 | 9.090 | 6.910 | 10.500 | 17.700 | 15.900 | 7.500 | 16.200 | 14.200 | 13.400 |
| 18 | 8.180 | 9.370 | 9.830 | 8.420 | 6.430 | 8.380 | 17.400 | 17.200 | 14.700 | 15.800 | 10.200 | 12.600 |
| 19 | 8.480 | 6.340 | 9.240 | 8.860 | 11.800 | 12.800 | 16.100 | 11.800 | 14.200 | 17.400 | 6.400 | 14.200 |
| 20 | 6.780 | 13.000 | 8.930 | 6.190 | 10.700 | 14.500 | 14.700 | 7.200 | 15.800 | 16.500 | 14.300 | 13.400 |
| 21 | 6.210 | 10.400 | 8.800 | 4.510 | 10.200 | 14.900 | 11.400 | 17.300 | 15.300 | 12.200 | 14.600 | 13.800 |
| 22 | 3.500 | 10.400 | 7.340 | 11.300 | 7.520 | 15.400 | 7.050 | 18.100 | 14.500 | 9.660 | 14.900 | 10.100 |
| 23 | 7.050 | 5.080 | 5.850 | 8.850 | 9.950 | 15.100 | 18.300 | 16.400 | 11.300 | 16.700 | 15.000 | 5.360 |
| 24 | 8.270 | 8.980 | 3.970 | 8.550 | 7.590 | 8.910 | 18.000 | 17.600 | 8.180 | 16.000 | 14.400 | 15.400 |
| 25 | 9.970 | 8.900 | 4.070 | 8.320 | 6.880 | 8.080 | 17.300 | 18.300 | 15.200 | 16.500 | 11.400 | 15.200 |
| 26 | 9.620 | 5.070 | 8.420 | 8.830 | 11.600 | 14.500 | 17.000 | 14.700 | 15.100 | 16.100 | 6.900 | 13.700 |
| 27 | 9.320 | 9.830 | 8.380 | 6.470 | 11.600 | 15.400 | 17.000 | 7.340 | 15.500 | 16.600 | 15.800 | 13.700 |
| 28 | 6.630 | 8.050 | 8.280 | 3.910 | 11.400 | 17.100 | 13.000 | 17.100 | 16.400 | 13.200 | 15.400 | 13.100 |
| 29 | 3.720 | 8.790 | 7.430 | 8.520 |  | 15.600 | 6.280 | 18.300 | 15.800 | 9.960 | 15.100 | 10.000 |
| 30 | 9.100 | 8.450 | 7.010 | 8.600 |  | 15.100 | 16.600 | 8.040 | 13.400 | 16.600 | 15.200 | 5.810 |
| 31 | 8.360 |  | 3.720 | 8.680 |  | 12.000 |  | 18.200 |  | 17.900 | 14.100 |  |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

STATE ARIZONA
MAJOR BASIN COLORADO RIVER
MINOR BASIN MIDDLE COLORADO RIVER
STATION LOCATION COLORADO RIVER AT
PAGE, ARIZONA

60

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE - GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 10 | 22 | 61 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 220 | | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 250 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 1000 | 0 | 0 | 20 | 0 | 40 | 0 | 20 | 890 | 0 | 80 | 87 | 2 | 85 | 1 | | | | | | | | | | | | | | | | |
| 12 | 2 | 61 | 600 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 560 | 0 | 210 | 92 | 1 | 82 | 1 | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 20 | 220 | | | | | | | | | | | | | | | | | | | | |
| 1 | 14 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 150 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 1 | 22 | 62 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 340 | 0 | 70 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 20 | 470 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 400 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 380 | 0 | 130 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 1100 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 1040 | 0 | 80 | 82 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 300 | 110 | 800 | | | | | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 700 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 720 | 0 | 720 | | | | | | | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 1700 | 0 | 0 | 60 | 0 | 210 | 0 | 170 | 1300 | 0 | 150 | 92 | 2 | 57 | 1 | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 1400 | 0 | 0 | 20 | 40 | 230 | 0 | 40 | 1080 | 20 | 100 | 92 | 2 | 57 | 1 | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 900 | 0 | 0 | 0 | 0 | 270 | 0 | 80 | 540 | 0 | 60 | 57 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 1000 | 0 | 0 | 180 | 0 | 20 | 0 | 290 | 520 | 70 | 590 | 68 | 1 | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 1200 | 0 | 0 | 150 | 0 | 0 | 0 | 310 | 790 | 170 | 170 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 14200 | 40 | 0 | 890 | 0 | 210 | 0 | 4350 | 8690 | 1350 | 1180 | 68 | 5 | 92 | 4 | 71 | 3 | 88 | 2 | 82 | 2 | 25 | 1 | 38 | 1 | 51 | 1 | 79 | 1 | | |
| 9 | 17 | 62 | 32600 | 0 | 840 | 570 | 0 | 0 | 0 | 3170 | 28060 | 1270 | 1690 | 92 | 7 | 88 | 5 | 68 | 5 | 87 | 4 | 82 | 4 | 17 | 3 | 89 | 3 | 81 | 3 | 38 | 2 | | |

**STATION LOCATION** COLORADO RIVER AT

PAGE, ARIZONA 060

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA *(Identifiable) Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 22 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 2 | 61 | 92 | 50 | 36 | 31 | 71 | 3 | 72 | 2 | 14 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 14 | 62 | 92 | 51 | 36 | 18 | 71 | 3 | 65 | 3 | 25 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 22 | 62 | | | | | | | | | | 110 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 36 | 25 | 92 | 8 | 65 | 6 | 51 | 5 | 56 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | | | | | | | | | | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 5 | 7 | 62 | 92 | 22 | 65 | 13 | 41 | 10 | 51 | 8 | 47 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 65 | 18 | 92 | 8 | 36 | 7 | 41 | 7 | 60 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 92 | 36 | 36 | 9 | 71 | 7 | 65 | 6 | 42 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 92 | 37 | 36 | 12 | 65 | 7 | 51 | 3 | 41 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 92 | 27 | 36 | 8 | 71 | 6 | 41 | 3 | 56 | 20 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 1 |
| 7 | 16 | 62 | 92 | 22 | 36 | 14 | 46 | 9 | 55 | 3 | 52 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 6 | 62 | 92 | 20 | 40 | 12 | 26 | 8 | 78 | 7 | 53 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 9 | 4 | 62 | 92 | 18 | 26 | 17 | 30 | 8 | 36 | 7 | 50 | - | - | - | | | | | | | | | | | - | | | | | | | - | - |
| 9 | 17 | 62 | 91 | 35 | 26 | 31 | 92 | 8 | 36 | 3 | 23 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | - | - |

# RADIOACTIVITY DETERMINATIONS

**STATE** ARIZONA
**MAJOR BASIN** COLORADO RIVER
**MINOR BASIN** MIDDLE COLORADO RIVER
**STATION LOCATION** COLORADO RIVER AT
PAGE, ARIZONA

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g |
| 10 | 2 | 61 | 10 | 12 | 157 | 83 | 3 | 6 | 160 | 83 | 912 | 118 | 48 | 42 | 960 | 125 | | | | | |
| 10 | 9 | 61 | 11 | 14 | 47 | 30 | 8 | 5 | 55 | 6 | 191 | 49 | 37 | 27 | 228 | 56 | | | | | |
| 10 | 15 | 61 | 10 | 26 | 22 | 18 | 5 | 5 | 27 | 19 | 92 | 34 | 32 | 21 | 124 | 40 | | | | | |
| 10 | 22 | 61 | 11 | 2 | 24 | 11 | 7 | 4 | 31 | 12 | 64 | 28 | 27 | 21 | 91 | 35 | | | | | |
| 10 | 30 | 61 | 11 | 20 | 47 | 20 | 12 | 5 | 59 | 21 | 152 | 45 | 37 | 26 | 189 | 52 | | | | | |
| 1 | 2 | 62 | 1 | 18 | 16 | 7 | 13 | 7 | 29 | 10 | 35 | 27 | 34 | 25 | 69 | 37 | | | | | |
| 1 | 8 | 62 | 1 | 19 | 8 | 7 | 12 | 7 | 20 | 10 | 62 | 28 | 29 | 25 | 91 | 38 | | | | | |
| 1 | 22 | 62 | 2 | 7 | 17 | 9 | 15 | 7 | 32 | 11 | 65 | 25 | 53 | 21 | 118 | 33 | | | | | |
| 1 | 27 | 62 | 2 | 12 | 8 | 5 | 11 | 7 | 19 | 9 | 38 | 20 | 43 | 22 | 81 | 30 | | | | | |
| 2 | 5 | 62 | 2 | 19 | 21 | 9 | 8 | 5 | 29 | 10 | 68 | 24 | 54 | 22 | 122 | 33 | | | | | |
| 2 | 12 | 62 | 2 | 26 | 76 | 28 | 16 | 11 | 92 | 30 | 192 | 35 | 46 | 20 | 238 | 40 | | | | | |
| 2 | 19 | 62 | 3 | 6 | 143 | 87 | 7 | 4 | 150 | 87 | 873 | 116 | 67 | 13 | 940 | 117 | | | | | |
| 2 | 26 | 62 | 3 | 15 | 74 | 38 | 2 | 4 | 76 | 38 | 363 | 44 | 64 | 20 | 427 | 48 | | | | | |
| 3 | 5 | 62 | 3 | 19 | 30 | 18 | 8 | 5 | 38 | 19 | 218 | 47 | 50 | 28 | 268 | 53 | | | | | |
| 3 | 12 | 62 | 3 | 23 | 22 | 15 | 7 | 6 | 29 | 16 | 100 | 24 | 31 | 26 | 131 | 35 | | | | | |
| 3 | 19 | 62 | 4 | 4 | 47 | 22 | 4 | 3 | 51 | 22 | 223 | 36 | 49 | 17 | 272 | 40 | | | | | |
| 3 | 26 | 62 | 4 | 9 | 48 | 24 | 19 | 8 | 67 | 25 | 177 | 35 | 51 | 22 | 228 | 41 | | | | | |
| 4 | 2 | 62 | 4 | 13 | 285 | 137 | 2 | 4 | 287 | 137 | 1243 | 223 | 77 | 22 | 1320 | 224 | | | | | |
| 4 | 9 | 62 | 4 | 26 | 107 | 53 | 11 | 5 | 118 | 53 | 406 | 87 | 52 | 12 | 458 | 88 | | | | | |
| 4 | 16 | 62 | 5 | 22 | 36 | 26 | 2 | 3 | 38 | 27 | 135 | 70 | 42 | 18 | 177 | 72 | | | | | |
| 4 | 23 | 62 | 5 | 28 | 39 | 27 | 0 | 1 | 39 | 27 | 193 | 55 | 0 | 20 | 193 | 59 | | | | | |
| 5 | 7 | 62 | 6 | 14 | 1 | 1 | 2 | 2 | 3 | 2 | 9 | 6 | 22 | 8 | 31 | 10 | | | | | |
| 5 | 14 | 62 | 6 | 22 | 11 | 5 | 2 | 1 | 13 | 5 | 42 | 7 | 17 | 4 | 59 | 8 | | | | | |
| 5 | 21 | 62 | 6 | 26 | 51 | 19 | 3 | 2 | 54 | 19 | 251 | 19 | 55 | 9 | 306 | 21 | | | | | |
| 5 | 28 | 62 | 6 | 29 | 33 | 39 | 5 | 2 | 38 | 39 | 86 | 28 | 23 | 17 | 109 | 33 | | | | | |
| 6 | 4 | 62 | 7 | 6 | 13 | 10 | 3 | 3 | 16 | 10 | 93 | 34 | 18 | 11 | 111 | 36 | | | | | |
| 6 | 11 | 62 | 7 | 12 | 11 | 6 | 3 | 3 | 14 | 7 | 20 | 18 | 11 | 15 | 31 | 23 | | | | | |
| 6 | 18 | 62 | 7 | 17 | 5 | 5 | 3 | 2 | 8 | 5 | 38 | 24 | 17 | 7 | 55 | 25 | | | | | |
| 6 | 25 | 62 | 7 | 25 | 7 | 4 | 3 | 2 | 10 | 4 | 41 | 10 | 15 | 8 | 56 | 13 | | | | | |
| 7 | 23 | 62 | 8 | 20 | 31 | 14 | 4 | 2 | 35 | 14 | 158 | 14 | 41 | 7 | 199 | 16 | | | | | |
| 7 | 30 | 62 | 8 | 21 | 28 | 12 | 5 | 5 | 33 | 13 | 94 | 21 | 48 | 16 | 142 | 26 | | | | | |
| 8 | 6 | 62 | 8 | 27 | 33 | 26 | 6 | 4 | 39 | 26 | 108 | 45 | 20 | 8 | 128 | 46 | | | | | |
| 8 | 13 | 62 | 8 | 30 | 53 | 41 | 5 | 4 | 58 | 41 | 304 | 108 | 32 | 26 | 336 | 110 | | | | | |
| 8 | 27 | 62 | 10 | 4 | - | - | - | - | - | - | 109 | 47 | 65 | 31 | 174 | 56 | | | | | |
| 9 | 4 | 62 | 9 | 20 | 16 | 12 | 7 | 6 | 23 | 13 | 50 | 50 | 23 | 37 | 73 | 62 | | | | | |
| 9 | 10 | 62 | 9 | 28 | 18 | 14 | 12 | 7 | 30 | 16 | 62 | 89 | 45 | 36 | 107 | 96 | | | | | |
| 9 | 17 | 62 | 10 | 10 | 31 | 17 | 11 | 8 | 42 | 19 | 88 | 49 | 65 | 39 | 153 | 63 | | | | | |
| 9 | 24 | 62 | 10 | 18 | 11 | 108 | 12 | 9 | 23 | 108 | 1101 | 448 | 39 | 37 | 1140 | 450 | | | | | |

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**MINOR BASIN** MIDDLE COLORADO RIVER

**STATION LOCATION** COLORADO RIVER AT
PAGE, ARIZONA

6

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 12 | 7 | 61 | 12 | 14 | 4300# | 77 | 20 | 57 | 0 | 5 | 8 | 1 | 1 | 6 | 0 | 2 | 1 | 1 | 3 |
| 9 | 4 | 62 | 9 | 18 | 5290 | 194 | 109 | 85 | - | - | - | - | - | - | - | - | - | - | - |

# ESTIMATED

MINOR BASIN MIDDLE COLORADO RIVER

STATION LOCATION COLORADO RIVER AT
PAGE, ARIZONA

| DATE OF SAMPLE |  |  | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND |  | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l. | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR |  |  |  |  |  | 1-HOUR mg/l | 24-HOUR mg/l |  |  |  |  |  |  |  |  |  |
| 10 | 2 | 61 | 15.2 | - | 8.1 | - | - | - | - | - | 42 | 128 | 352 | - | 8000 | - | - | 1416 |
| 10 | 9 | 61 | 15.0 | - | 8.3 | - | - | - | - | - | 50 | 216 | 252 | 0 | 1600 | - | - | 1249 |
| 10 | 15 | 61 | 14.4 | - | 8.0 | - | - | - | - | - | 48 | 150 | 386 | 15 | 3900 | - | .1 | 897 |
| 10 | 22 | 61 | 13.0 | - | 8.1 | - | - | - | - | - | 51 | 144 | 348 | 10 | 1100 | - | .1 | 846 |
| 10 | 30 | 61 | 9.6 | - | 7.8 | - | - | - | - | - | 53 | 160 | 364 | 8 | 1100 | 312 | .2 | 814 |
| 11 | 6 | 61 | 7.3 | - | 8.2 | - | - | - | - | - | 62 | 250 | 410 | 10 | 2500 | - | - | 958 |
| 11 | 13 | 61 | 7.3 | 10.6 | 8.1 | - | - | - | - | - | 55 | 164 | 400 | 10 | 470 | - | - | 925 |
| 11 | 20 | 61 | 6.5 | 10.8 | 8.1 | - | - | - | - | - | 60 | 160 | 384 | 10 | 450 | - | - | 763 |
| 11 | 27 | 61 | 6.1 | 12.0 | 8.2 | - | - | - | - | - | 61 | 180 | 380 | 8 | 550 | - | - | 877 |
| 12 | 4 | 61 | 6.2 | 11.5 | 8.3 | - | - | - | - | .0 | 76 | 160 | 320 | 25 | 450 | - | - | 956 |
| 12 | 11 | 61 | 1.5 | 12.5 | 8.3 | - | - | - | - | - | 68 | 174 | 400 | - | 180 | - | - | 973 |
| 12 | 18 | 61 | .3 | - | 8.2 | - | - | - | - | .0 | 98 | 170 | 435 | 20 | 220 | - | - | 1834 |
| 1 | 2 | 62 | .3 | 13.5 | 8.2 | - | - | - | - | .0 | 86 | 180 | 468 | - | 230 | - | .0 | 717 |
| 1 | 8 | 62 | 6.3 | 13.5 | 8.2 | - | - | - | - | - | 92 | 190 | 440 | 10 | 235 | - | - | 1092 |
| 1 | 15 | 62 | 1.0 | 12.6 | 8.2 | - | - | - | - | - | 89 | 160 | 392 | 8 | 260 | 420 | - | 733 |
| 1 | 22 | 62 | 2.6 | 12.0 | 8.2 | - | - | - | - | .0 | 85 | 160 | 416 | 10 | 150 | 293 | .0 | 1034 |
| 1 | 28 | 62 | 2.9 | 8.6 | 8.4 | - | - | - | - | - | 100 | 180 | 408 | 10 | 150 | - | .0 | 960 |
| 2 | 5 | 62 | 2.6 | - | 8.5 | - | - | - | - | - | 95 | 172 | 384 | 5 | 170 | - | .0 | 547 |
| 2 | 12 | 62 | 9.0 | 9.5 | 8.1 | - | - | - | - | - | 63 | 142 | 368 | 5 | 450 | - | - | 613 |
| 2 | 19 | 62 | 6.0 | 8.3 | 8.1 | - | - | - | - | .0 | 32 | - | - | 5 | 11000 | 220 | .0 | 578 |
| 2 | 26 | 62 | 4.5 | 11.3 | 8.0 | - | - | - | - | .0 | 53 | - | 360 | 5 | 3125 | 238 | .3 | 865 |
| 3 | 5 | 62 | 5.0 | 11.4 | 8.0 | - | - | - | - | - | - | 182 | 370 | 10 | 1100 | - | - | 1062 |
| 3 | 12 | 62 | 5.0 | 12.0 | 8.1 | - | - | - | - | - | 135 | 176 | 384 | 0 | 800 | 420 | - | 847 |
| 3 | 19 | 62 | 11.0 | 11.2 | 8.0 | - | - | - | - | .0 | 18 | 122 | 227 | 8 | 1300 | 200 | - | 530 |
| 3 | 26 | 62 | 15.0 | 10.5 | 8.2 | - | - | - | - | .0 | 83 | 180 | 354 | 19 | 1300 | 250 | - | 690 |
| 4 | 2 | 62 | 12.0 | 12.0 | 7.8 | - | - | - | - | .0 | 53 | 158 | 328 | 15 | 4500 | - | - | 689 |
| 4 | 9 | 62 | 12.6 | 9.4 | 8.1 | - | - | - | - | .0 | 45 | 148 | 268 | 35 | 4000 | 260 | 7.6 | 632 |
| 4 | 16 | 62 | 15.0 | 9.9 | 7.8 | - | - | - | - | .2 | 39 | 156 | 240 | 19 | 3000 | 97 | .0 | 512 |
| 4 | 23 | 62 | 16.0 | 9.0 | 7.8 | - | - | - | - | .6 | 26 | 141 | 204 | 8 | 3500 | 100 | .0 | 490 |
| 4 | 30 | 62 | 14.9 | 10.1 | 7.9 | - | - | - | - | .0 | 21 | 142 | 184 | 0 | 3000 | - | .0 | 595 |
| 5 | 7 | 62 | 16.5 | 10.5 | 8.3 | - | - | - | - | .3 | 20 | 172 | 192 | 22 | 1500 | 105 | - | 397 |
| 5 | 14 | 62 | 15.5 | 10.3 | 8.3 | - | - | - | - | .7 | 19 | 144 | 168 | 15 | 1500 | 105 | - | 405 |
| 5 | 21 | 62 | 15.0 | 9.8 | 8.2 | - | - | - | - | .3 | 24 | 158 | 172 | 12 | 950 | 95 | 2.6 | 420 |
| 5 | 28 | 62 | 19.0 | 8.0 | 7.4 | - | - | - | - | .4 | - | 120 | 220 | 15 | 650 | 86 | - | 592 |
| 6 | 4 | 62 | 19.0 | 7.5 | 7.7 | - | - | - | - | .6 | 6 | 155 | 178 | 0 | 540 | 83 | - | 596 |
| 6 | 11 | 62 | 22.0 | 8.0 | 7.1 | - | - | - | - | .8 | 23 | 108 | 190 | 14 | 300 | 88 | - | 499 |
| 6 | 18 | 62 | 19.0 | 9.5 | 7.8 | - | - | - | - | .4 | 15 | 104 | 180 | 21 | 400 | - | .0 | 482 |
| 6 | 25 | 62 | 20.0 | 8.4 | 8.0 | - | - | - | - | .2 | 19 | 92 | 180 | 22 | 320 | 46 | .0 | - |
| 7 | 2 | 62 | 25.0 | 8.6 | 8.1 | - | - | - | - | .3 | 20 | 132 | 148 | 20 | 500 | - | .0 | 442 |

**MINOR BASIN** MIDDLE COLORADO RIVER

**STATION LOCATION** COLORADO RIVER AT
PAGE, ARIZONA 60

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 9 | 62 | 24.0 | 8.0 | 8.1 | - | - | - | - | .5 | 26 | 160 | 202 | 22 | 2000 | 51 | .0 | 473 | *100 |
| 7 | 16 | 62 | 23.0 | 7.8 | 8.1 | - | - | - | - | .4 | 32 | 146 | 276 | 20 | 2000 | 64 | .0 | - | 120 |
| 7 | 23 | 62 | 21.0 | 8.0 | 8.3 | - | - | - | - | - | 45 | 142 | 264 | - | 320 | 150 | .0 | 513 | - |
| 7 | 30 | 62 | 25.9 | 8.1 | 8.2 | - | - | - | - | - | 40 | 168 | 284 | - | 750 | - | - | 543 | - |
| 8 | 5 | 62 | 25.0 | - | 8.0 | - | - | - | - | - | 55 | 236 | 328 | - | 1000 | - | - | 623 | - |
| 8 | 13 | 62 | 26.0 | 9.5 | 8.3 | - | - | - | - | .2 | 70 | 180 | 348 | 8 | 800 | 245 | .0 | 841 | *130 |
| 8 | 20 | 62 | 27.0 | 10.2 | 8.1 | - | - | - | - | .2 | 50 | 190 | 330 | 0 | 750 | 410 | .0 | 776 | - |
| 8 | 27 | 62 | 26.0 | 9.2 | 7.8 | - | - | - | - | .0 | 90 | 184 | 380 | 0 | 650 | - | .0 | 791 | 130 |
| 9 | 4 | 62 | 24.0 | 9.3 | 8.4 | - | - | - | - | .0 | 106 | 158 | 458 | 5 | 310 | - | - | 791 | 300 |
| 9 | 10 | 62 | 21.0 | 7.5 | 8.4 | - | - | - | - | .9 | 84 | 236 | 496 | 0 | 400 | 460 | .0 | 1228 | - |
| 9 | 17 | 62 | 24.5 | 7.0 | 8.4 | - | - | - | - | .4 | 100 | 160 | 520 | 0 | 300 | 280 | .0 | 960 | - |
| 9 | 24 | 62 | 23.0 | 5.9 | 7.7 | - | - | - | - | .3 | 85 | 224 | 540 | 8 | 5000 | 360 | .0 | 1052 | 400 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Lees Ferry, Arizona
Operated by U.S. Geological Survey

STATE Arizona
MAJOR BASIN Colorado River
MINOR BASIN Middle Colorado River
STATION LOCATION Colorado River at Page, Arizona

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11.600 | 13.200 | 7.690 | 6.000 | 5.610 | 9.760 | 33.500 | 65.200 | 39.700 | 50.200 | 12.000 | 4.800 |
| 2 | 11.300 | 11.800 | 7.860 | 5.790 | 5.790 | 9.300 | 37.000 | 67.400 | 38.400 | 49.600 | 11.600 | 4.580 |
| 3 | 11.100 | 11.100 | 8.000 | 5.610 | 5.910 | 8.650 | 32.300 | 66.300 | 36.600 | 49.100 | 10.700 | 4.450 |
| 4 | 11.100 | 10.100 | 8.040 | 5.530 | 6.000 | 7.970 | 28.000 | 61.900 | 36.100 | 49.600 | 10.100 | 4.300 |
| 5 | 11.300 | 9.800 | 8.140 | 5.530 | 6.280 | 6.900 | 26.500 | 57.500 | 37.400 | 48.600 | 9.950 | 4.180 |
| 6 | 11.100 | 9.910 | 8.140 | 5.670 | 6.480 | 6.130 | 25.100 | 50.200 | 39.200 | 46.500 | 9.800 | 4.060 |
| 7 | 10.300 | 9.640 | 8.000 | 5.530 | 6.840 | 6.190 | 25.800 | 48.600 | 41.600 | 44.000 | 9.570 | 3.990 |
| 8 | 9.800 | 9.450 | 7.900 | 5.360 | 7.110 | 6.380 | 28.000 | 51.200 | 44.000 | 41.600 | 9.340 | 3.940 |
| 9 | 10.100 | 8.970 | 7.830 | 5.500 | 7.480 | 6.670 | 29.600 | 53.300 | 46.500 | 38.400 | 9.160 | 3.880 |
| 10 | 12.200 | 8.790 | 7.800 | 5.730 | 8.500 | 6.900 | 28.800 | 57.500 | 49.100 | 35.600 | 9.120 | 3.880 |
| 11 | 18.700 | 8.570 | 7.410 | 6.320 | 10.100 | 7.660 | 28.400 | 63.000 | 49.600 | 32.700 | 8.610 | 3.880 |
| 12 | 18.100 | 8.390 | 7.040 | 5.410 | 12.000 | 8.900 | 27.300 | 69.600 | 48.600 | 30.700 | 8.540 | 3.810 |
| 13 | 18.700 | 8.360 | 6.740 | 4.950 | 13.400 | 10.200 | 26.500 | 74.000 | 49.100 | 28.400 | 7.940 | 3.720 |
| 14 | 17.200 | 8.470 | 5.790 | 4.960 | 14.200 | 11.600 | 25.400 | 79.200 | 49.600 | 26.500 | 7.410 | 3.790 |
| 15 | 14.400 | 8.540 | 4.620 | 4.930 | 16.300 | 11.100 | 24.300 | 82.400 | 51.200 | 24.700 | 7.000 | 3.940 |
| 16 | 12.700 | 8.470 | 4.230 | 5.010 | 27.300 | 10.100 | 24.000 | 84.400 | 53.300 | 22.900 | 6.700 | 4.040 |
| 17 | 11.800 | 8.290 | 3.850 | 4.850 | 31.900 | 9.120 | 26.200 | 83.400 | 55.400 | 21.900 | 6.570 | 4.130 |
| 18 | 11.100 | 8.320 | 3.590 | 4.500 | 32.700 | 8.470 | 31.900 | 80.200 | 56.400 | 21.200 | 6.380 | 4.080 |
| 19 | 10.900 | 8.180 | 3.400 | 4.380 | 29.900 | 8.220 | 38.800 | 74.000 | 55.400 | 19.600 | 6.130 | 4.040 |
| 20 | 10.900 | 7.970 | 3.340 | 4.550 | 26.500 | 8.110 | 43.500 | 66.300 | 53.300 | 18.400 | 5.940 | 4.230 |
| 21 | 10.700 | 8.000 | 4.800 | 4.930 | 23.600 | 8.080 | 48.000 | 59.700 | 49.600 | 17.500 | 5.730 | 7.110 |
| 22 | 10.900 | 8.290 | 5.700 | 5.850 | 19.300 | 8.140 | 51.000 | 52.200 | 47.000 | 16.600 | 5.610 | 7.660 |
| 23 | 10.900 | 8.470 | 6.000 | 6.030 | 16.300 | 8.790 | 56.400 | 46.000 | 48.000 | 16.300 | 5.440 | 7.240 |
| 24 | 10.300 | 8.320 | 5.850 | 6.000 | 14.200 | 10.000 | 58.600 | 44.000 | 51.200 | 16.100 | 5.330 | 6.000 |
| 25 | 10.100 | 8.140 | 5.820 | 6.320 | 12.700 | 11.800 | 59.700 | 41.100 | 52.200 | 15.800 | 5.200 | 5.410 |
| 26 | 9.830 | 7.830 | 5.820 | 6.640 | 11.300 | 14.400 | 59.700 | 37.900 | 53.300 | 14.400 | 5.100 | 7.070 |
| 27 | 9.720 | 7.660 | 5.820 | 6.670 | 10.700 | 13.400 | 59.700 | 37.000 | 53.300 | 13.700 | 5.140 | 7.080 |
| 28 | 9.530 | 7.480 | 5.820 | 6.440 | 10.300 | 12.200 | 61.900 | 37.000 | 52.200 | 13.200 | 5.030 | 7.970 |
| 29 | 9.300 | 7.520 | 5.730 | 6.130 |  | 11.600 | 63.000 | 37.900 | 51.200 | 12.500 | 5.030 | 10.300 |
| 30 | 9.340 | 7.620 | 5.670 | 5.880 |  | 12.700 | 64.100 | 38.800 | 51.200 | 12.500 | 5.030 | 9.950 |
| 31 | 10.500 |  | 5.730 | 5.730 |  | 22.200 |  | 40.200 |  | 12.700 | 4.980 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

| | |
|---|---|
| **STATE** | COLORADO |
| **MAJOR BASIN** | COLORADO RIVER |
| **MINOR BASIN** | UPPER COLORADO RIVER |
| **STATION LOCATION** | COLORADO RIVER AT<br>LOMA, COLORADO |

6

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 16 | 61 | 10 | 30 | 0 | 2 | 3 | 4 | 3 | 4 | 35 | 18 | 21 | 21 | 56 | 28 | | | | | | |
| 10 | 23 | 61 | 11 | 3 | 3 | 2 | 6 | 4 | 9 | 4 | 18 | 16 | 15 | 20 | 33 | 26 | | | | | | |
| 10 | 30 | 61 | 11 | 13 | 0 | 2 | 1 | 4 | 1 | 4 | 31 | 16 | 76 | 22 | 107 | 27 | | | | | | |
| 11 | 6 | 61 | 11 | 21 | 2 | 3 | 5 | 5 | 7 | 6 | 19 | 16 | 50 | 21 | 69 | 26 | | | | | | |
| 11 | 20 | 61 | 12 | 1 | 2 | 3 | 9 | 6 | 11 | 7 | 12 | 17 | 44 | 22 | 56 | 28 | | | | | | |
| 11 | 27 | 61 | 12 | 4 | 17 | 6 | 11 | 6 | 28 | 8 | 79 | 13 | 49 | 14 | 128 | 19 | | | | | | |
| 12 | 11 | 61 | 12 | 21 | 3 | 3 | 11 | 8 | 14 | 9 | 33 | 18 | 36 | 24 | 69 | 30 | | | | | | |
| 12 | 18 | 61 | 1 | 2 | 3 | 2 | 8 | 6 | 11 | 6 | 19 | 16 | 45 | 22 | 64 | 27 | | | | | | |
| 1 | 9 | 62 | 1 | 22 | 0 | 3 | 4 | 5 | 4 | 6 | 32 | 18 | 24 | 21 | 56 | 28 | | | | | | |
| 1 | 16 | 62 | 1 | 29 | 10 | 6 | 10 | 7 | 20 | 9 | 19 | 25 | 15 | 26 | 34 | 36 | | | | | | |
| 1 | 26 | 62 | 2 | 6 | 1 | 1 | 5 | 5 | 6 | 5 | 8 | 8 | 36 | 13 | 44 | 15 | | | | | | |
| 1 | 29 | 62 | 2 | 12 | 2 | 2 | 2 | 4 | 4 | 4 | 0 | 16 | 34 | 21 | 34 | 26 | | | | | | |
| 2 | 6 | 62 | 2 | 19 | 3 | 3 | 10 | 6 | 13 | 6 | 59 | 18 | 44 | 20 | 103 | 27 | | | | | | |
| 2 | 22 | 62 | 3 | 7 | 8 | 8 | 8 | 6 | 16 | 10 | 99 | 27 | 62 | 22 | 161 | 35 | | | | | | |
| 2 | 26 | 62 | 3 | 14 | 2 | 3 | 0 | 4 | 2 | 5 | 96 | 19 | 38 | 21 | 134 | 28 | | | | | | |
| 3 | 5 | 62 | 3 | 19 | 3 | 3 | 4 | 4 | 7 | 5 | 26 | 18 | 50 | 21 | 76 | 28 | | | | | | |
| 3 | 12 | 62 | 3 | 27 | 0 | 3 | 5 | 4 | 5 | 5 | 39 | 17 | 12 | 18 | 51 | 25 | | | | | | |
| 3 | 21 | 62 | 4 | 4 | 17 | 9 | 2 | 4 | 19 | 10 | 71 | 33 | 34 | 27 | 105 | 43 | | | | | | |
| 3 | 26 | 62 | 4 | 10 | 13 | 6 | 4 | 4 | 17 | 7 | 83 | 23 | 52 | 21 | 135 | 31 | | | | | | |
| 4 | 2 | 62 | 4 | 13 | 16 | 7 | 6 | 4 | 22 | 8 | 102 | 16 | 50 | 12 | 152 | 20 | | | | | | |
| 4 | 9 | 62 | 4 | 23 | 4 | 2 | 6 | 3 | 10 | 4 | 70 | 10 | 52 | 11 | 122 | 15 | | | | | | |
| 4 | 30 | 62 | 6 | 4 | 6 | 5 | 1 | 2 | 7 | 5 | 91 | 19 | 31 | 8 | 122 | 21 | | | | | | |
| 5 | 7 | 62 | 6 | 13 | 5 | 5 | 1 | 2 | 6 | 5 | 56 | 12 | 20 | 8 | 76 | 14 | | | | | | |
| 5 | 14 | 62 | 6 | 21 | 12 | 7 | 1 | 1 | 13 | 7 | 70 | 17 | 20 | 9 | 90 | 19 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | 2 | 1 | 4 | 2 | 6 | 2 | 24 | 8 | 25 | 9 | 49 | 12 | | | | | | |
| 5 | 28 | 62 | 6 | 28 | 1 | 2 | 1 | 2 | 2 | 3 | 42 | 16 | 23 | 14 | 65 | 21 | | | | | | |
| 6 | 4 | 62 | 7 | 7 | 4 | 2 | 1 | 2 | 5 | 3 | 15 | 4 | 14 | 4 | 29 | 6 | | | | | | |
| 6 | 11 | 62 | 7 | 12 | 1 | 1 | 2 | 2 | 3 | 2 | 15 | 7 | 23 | 9 | 38 | 11 | | | | | | |
| 6 | 18 | 62 | 7 | 18 | 1 | 1 | 2 | 2 | 3 | 2 | 9 | 6 | 20 | 8 | 29 | 10 | | | | | | |
| 6 | 25 | 62 | 7 | 25 | 1 | 1 | 1 | 1 | 2 | 1 | 18 | 8 | 15 | 8 | 33 | 11 | | | | | | |
| 7 | 2 | 62 | 8 | 10 | 2 | 2 | 1 | 2 | 3 | 3 | 25 | 5 | 20 | 4 | 45 | 6 | | | | | | |
| 7 | 11 | 62 | 8 | 6 | 2 | 2 | 2 | 2 | 4 | 3 | 16 | 13 | 27 | 14 | 43 | 19 | | | | | | |
| 7 | 16 | 62 | 8 | 20 | 1 | 1 | 6 | 3 | 7 | 3 | 16 | 6 | 30 | 7 | 46 | 9 | | | | | | |
| 7 | 23 | 62 | 8 | 21 | 1 | 1 | 1 | 3 | 2 | 3 | 3 | 10 | 53 | 17 | 56 | 20 | | | | | | |
| 7 | 30 | 62 | 8 | 28 | 3 | 3 | 6 | 4 | 9 | 5 | 9 | 21 | 31 | 26 | 40 | 33 | | | | | | |
| 8 | 6 | 62 | 8 | 27 | 6 | 4 | 3 | 5 | 9 | 6 | 5 | 11 | 14 | 14 | 19 | 18 | | | | | | |
| 8 | 20 | 62 | 9 | 6 | 0 | 3 | 10 | 10 | 10 | 10 | 26 | 28 | 48 | 38 | 74 | 47 | | | | | | |
| 8 | 28 | 62 | 9 | 13 | 0 | 2 | 12 | 8 | 12 | 8 | 20 | 30 | 24 | 44 | 44 | 53 | | | | | | |
| 9 | 4 | 62 | 9 | 24 | 0 | 2 | 11 | 10 | 11 | 12 | 6 | 23 | 27 | 37 | 33 | 44 | | | | | | |
| 9 | 11 | 62 | 9 | 27 | 1 | 2 | 13 | 9 | 14 | 9 | 26 | 33 | 86 | 50 | 112 | 60 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** COLORADO
**MAJOR BASIN** COLORADO RIVER
**MINOR BASIN** UPPER COLORADO RIVER
**STATION LOCATION** COLORADO RIVER AT
LOMA, COLORADO

6

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 9 | 17 | 62 | 10 | 19 | 0 | 2 | 12 | 10 | 12 | 10 | 56 | 29 | 55 | 47 | 111 | 55 | | | | | | |
| 9 | 24 | 62 | 10 | 18 | 26 | 16 | 3 | 6 | 29 | 17 | 102 | 78 | 57 | 37 | 159 | 86 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** COLORADO

**MAJOR BASIN** COLORADO RIVER

**MINOR BASIN** UPPER COLORADO RIVER

**STATION LOCATION** COLORADO RIVER AT
LOMA, COLORADO

6

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLUE - GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | TOTAL | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 16 | 61 | 1000 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 950 | 20 | 560 | 92 | 1 | 87 | 1 | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 1000 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 980 | 0 | 490 | 92 | 2 | 82 | 1 | | | | | | | | | | | | | | | | |
| 11 | 1 | 61 | 600 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 500 | 0 | 80 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 12 | 11 | 61 | 700 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 670 | 0 | 380 | 82 | 2 | 92 | 1 | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 1300 | 0 | 0 | 0 | 0 | 50 | 0 | 50 | 1240 | 0 | 50 | 82 | 2 | 92 | 1 | | | | | | | | | | | | | | | | |
| 1 | 10 | 62 | 600 | 0 | 20 | 0 | 0 | 0 | 0 | 20 | 560 | 0 | 670 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 6 | 62 | 2800 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 2690 | 0 | 910 | 82 | 3 | 92 | 2 | | | | | | | | | | | | | | | | |
| 2 | 22 | 62 | 2400 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 2350 | 0 | 320 | 87 | 3 | 85 | 2 | 82 | 2 | 81 | 1 | 92 | 1 | | | | | | | | | | |
| 3 | 5 | 62 | 3100 | 0 | 20 | 20 | 20 | 0 | 100 | 80 | 2820 | 80 | 680 | 82 | 3 | 87 | 3 | 92 | 1 | 85 | 1 | | | | | | | | | | | | |
| 3 | 21 | 62 | 2300 | 0 | 0 | 20 | 0 | 0 | 0 | 40 | 2240 | 0 | 310 | 92 | 3 | 82 | 2 | 87 | 2 | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 3200 | 0 | 0 | 0 | 0 | 60 | 0 | 80 | 3020 | 0 | 350 | 82 | 3 | 87 | 3 | 92 | 2 | 88 | 1 | | | | | | | | | | | | |
| 4 | 16 | 62 | 6400 | 0 | 0 | 0 | 20 | 50 | 0 | 90 | 6220 | 0 | 480 | | | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 700 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 530 | 20 | 530 | | | | | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 1200 | 0 | 0 | 0 | 0 | 0 | 0 | 190 | 1030 | 0 | 120 | 87 | 2 | 92 | 1 | 68 | 1 | 82 | 1 | | | | | | | | | | | | |
| 6 | 4 | 62 | 1200 | 0 | 0 | 0 | 0 | 50 | 0 | 20 | 1090 | 20 | 380 | 92 | 2 | 87 | 1 | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 1300 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 1300 | 0 | 190 | 92 | 2 | 85 | 1 | 88 | 1 | 87 | 1 | | | | | | | | | | | | |
| 7 | 2 | 62 | 2700 | 0 | 80 | 0 | 0 | 0 | 0 | 440 | 2170 | 290 | 680 | 82 | 2 | 92 | 2 | 87 | 1 | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 2100 | 0 | 0 | 0 | 0 | 0 | 0 | 300 | 1820 | 80 | 800 | 92 | 3 | 82 | 2 | 87 | 1 | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 2900 | 0 | 0 | 60 | 0 | 80 | 0 | 120 | 2650 | 40 | 660 | 92 | 4 | 82 | 1 | 87 | 1 | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 8400 | 0 | 0 | 300 | 0 | 0 | 0 | 1820 | 6290 | 40 | 3290 | 87 | 4 | 68 | 4 | 92 | 4 | 81 | 3 | 88 | 2 | 82 | 2 | 38 | 1 | 79 | 1 | 85 | 1 | | |
| 9 | 4 | 62 | 6000 | 0 | 0 | 250 | 0 | 210 | 0 | 1240 | 4350 | 210 | 620 | 68 | 4 | 87 | 3 | 81 | 3 | 79 | 3 | 92 | 2 | 88 | 2 | 85 | 1 | 38 | 1 | 51 | 1 | | |
| 9 | 17 | 62 | 900 | 0 | 0 | 120 | 0 | 10 | 0 | 290 | 530 | 30 | 740 | 68 | 1 | 87 | 1 | | | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** COLORADO

**MAJOR BASIN** COLORADO RIVER

**MINOR BASIN** UPPER COLORADO RIVER

**STATION LOCATION** COLORADO RIVER AT
LOMA, COLORADO 006

| DATE OF SAMPLE MONTH | DAY | YEAR | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) 1ST SPECIES | 1ST PERCENT | 2ND SPECIES | 2ND PERCENT | 3RD SPECIES | 3RD PERCENT | 4TH SPECIES | 4TH PERCENT | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA Number per ml. | PROTOZOA (Identifiable) Number per ml. | MICROINVERTEBRATES: ROTIFERS NUMBER PER LITER | ROTIFERS GENERA AND COUNT LEVEL (See text for Codes) 1ST GENUS | 1ST COUNT LEVEL | 2ND GENUS | 2ND COUNT LEVEL | 3RD GENUS | 3RD COUNT LEVEL | 4TH GENUS | 4TH COUNT LEVEL | 5TH GENUS | 5TH COUNT LEVEL | CRUSTACEA NUMBER PER LITER | CRUSTACEA GENERA AND COUNT LEVEL (See text for Codes) 1ST GENUS | 1ST COUNT LEVEL | 2ND GENUS | 2ND COUNT LEVEL | 3RD GENUS | 3RD COUNT LEVEL | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 16 | 61 | 92 | 24 | 36 | 21 | 65 | 7 | 51 | 4 | 44 | .0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 1 | 61 | 92 | 43 | 64 | 19 | 36 | 8 | 51 | 7 | 23 | 3950 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 36 | 26 | 92 | 25 | 65 | 7 | 51 | 7 | 35 | 0 | 0 | 9 | 6 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 11 | 61 | 36 | 47 | 92 | 30 | 51 | 7 | 65 | 4 | 12 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 36 | 41 | 92 | 24 | 51 | 6 | 65 | 4 | 25 | 290 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 1 | 10 | 62 | 92 | 38 | 36 | 25 | 51 | 12 | 65 | 8 | 17 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 6 | 62 | 36 | 36 | 92 | 26 | 65 | 6 | 86 | 3 | 29 | 60 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 22 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 36 | 28 | 65 | 24 | 92 | 8 | 46 | 6 | 34 | 210 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 21 | 62 | 92 | 28 | 36 | 24 | 65 | 20 | 71 | 5 | 23 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 36 | 34 | 65 | 16 | 92 | 12 | 71 | 4 | 34 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 92 | 25 | 36 | 14 | 86 | 6 | 51 | 4 | 51 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 65 | 15 | 36 | 14 | 92 | 11 | 52 | 5 | 55 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 92 | 44 | 65 | 13 | 36 | 5 | 71 | 3 | 35 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 92 | 23 | 65 | 9 | 36 | 7 | 51 | 5 | 56 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 36 | 25 | 92 | 21 | 65 | 10 | 71 | 5 | 39 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 92 | 32 | 36 | 22 | 65 | 11 | 56 | 4 | 31 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 92 | 40 | 36 | 11 | 71 | 4 | 65 | 3 | 42 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 1 |
| 8 | 20 | 62 | 92 | 20 | 65 | 19 | 64 | 10 | 36 | 6 | 45 | 0 | 0 | 6 | 22 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 26 | 12 | 92 | 12 | 64 | 12 | 16 | 11 | 53 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 9 | 17 | 62 | 26 | 19 | 64 | 10 | 70 | 10 | 92 | 10 | 51 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

**MINOR BASIN** UPPER COLORADO RIVER

**STATION LOCATION** COLORADO RIVER AT

LOMA, COLORADO

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 6 | 61 | 3.0 | 6.8 | 8.5 | 1.5 | - | - | - | .3 | 50 | 140 | 292 | 5 | 14 | 344 | .0 | 834 | 2800 |
| 11 | 13 | 61 | 3.0 | 8.2 | 8.5 | 1.6 | - | - | - | .3 | 58 | 136 | 286 | - | 18 | 336 | - | 814 | - |
| 11 | 20 | 61 | 2.0 | 6.7 | 8.3 | 1.4 | - | - | - | .3 | 82 | 140 | 344 | 5 | 25 | 328 | .1 | 856 | *200 |
| 11 | 27 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 12 | 11 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .1 | - | - |
| 12 | 18 | 61 | 1.0 | 8.3 | 8.7 | 3.6 | - | - | - | .4 | 66 | 144 | 290 | 5 | 21 | 340 | .0 | 884 | 12000 |
| 1 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 1 | 9 | 62 | .0 | 9.2 | 8.6 | 4.7 | - | - | - | .2 | 54 | 136 | 278 | - | 32 | 320 | .0 | 868 | 15000 |
| 1 | 16 | 62 | 1.0 | 9.5 | 8.2 | 2.3 | - | - | - | 1.5 | 154 | 172 | 440 | - | 135 | 440 | .2 | 1037 | 1300 |
| 1 | 29 | 62 | 2.0 | 9.6 | 8.1 | 2.2 | - | - | - | 1.0 | 160 | 168 | 428 | - | 28 | 432 | .3 | 1065 | 10000 |
| 2 | 6 | 62 | .0 | 9.2 | 8.3 | 2.8 | - | - | - | .2 | 106 | 140 | 348 | - | 148 | 352 | .1 | - | 5800 |
| 2 | 12 | 62 | 2.0 | 8.3 | 8.0 | - | - | - | - | 1.1 | 70 | 132 | 296 | - | 2000 | 300 | .2 | 668 | 9600 |
| 2 | 19 | 62 | 2.0 | 6.0 | 8.3 | .6 | - | - | - | 1.2 | 100 | 296 | 348 | 10 | 460 | 392 | .0 | 823 | 4000 |
| 2 | 26 | 62 | 2.0 | 5.7 | 8.3 | 2.0 | - | - | - | 1.0 | 116 | 184 | 340 | 5 | 84 | 328 | .0 | 774 | 22000 |
| 3 | 5 | 62 | 2.0 | 9.2 | 7.0 | 4.1 | - | - | - | .2 | 80 | 144 | 328 | - | 89 | 336 | - | 744 | 120000 |
| 3 | 12 | 62 | 2.0 | 9.8 | 8.3 | 3.9 | - | - | - | 1.3 | 96 | 100 | 300 | - | 90 | 328 | .0 | 669 | 1800 |
| 3 | 26 | 62 | 8.0 | 7.9 | 8.4 | 2.7 | - | - | - | .6 | 102 | 140 | 300 | 10 | 380 | 344 | .0 | 701 | 9000 |
| 4 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | 20 | - | - | .0 | - | - |
| 4 | 9 | 62 | 8.0 | 7.0 | 8.2 | 4.2 | - | - | - | .1 | 60 | 128 | 240 | - | 480 | 224 | - | 459 | 4900 |
| 4 | 16 | 62 | 11.0 | 6.4 | 8.1 | 4.9 | - | - | - | .6 | 36 | 124 | 184 | - | 1700 | 140 | .2 | 360 | 9200 |
| 4 | 23 | 62 | 10.0 | 7.6 | 8.2 | 3.8 | - | - | - | .5 | - | 100 | 152 | - | 550 | - | .2 | 247 | 4700 |
| 4 | 30 | 62 | 8.0 | 8.2 | 8.2 | - | - | - | - | .6 | 180 | 104 | 152 | - | 700 | 120 | .4 | - | 3600 |
| 5 | 7 | 62 | 12.0 | 7.4 | 8.4 | 1.5 | - | - | - | .8 | 24 | 100 | 152 | - | 380 | 112 | .3 | 252 | 4000 |
| 5 | 14 | 62 | 10.0 | 7.6 | 8.0 | 1.6 | - | - | - | .2 | 160 | 100 | 140 | 20 | 400 | 80 | .0 | - | 10000 |
| 5 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4000 |
| 5 | 21 | 62 | 12.0 | 7.6 | 8.3 | 2.3 | - | - | - | .5 | 34 | 112 | 170 | - | 130 | 136 | .9 | 297 | 2800 |
| 5 | 28 | 62 | - | - | - | - | - | - | - | - | - | - | - | 15 | - | - | - | - | - |
| 6 | 4 | 62 | 14.0 | 7.4 | 8.4 | 3.2 | - | - | - | .2 | 32 | 102 | 188 | 10 | 110 | 152 | .1 | - | 9400 |
| 6 | 18 | 62 | 13.0 | 8.3 | 8.4 | 2.4 | - | - | - | .2 | 30 | 108 | 344 | 10 | 64 | 160 | .0 | - | 4400 |
| 7 | 2 | 62 | 16.0 | 6.9 | 8.3 | - | - | - | - | .4 | 28 | 100 | 168 | 5 | 190 | 148 | .0 | - | 9400 |
| 7 | 11 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | .0 | - | - |
| 7 | 16 | 62 | 18.0 | 7.0 | 8.5 | - | - | - | - | .5 | 44 | 112 | 252 | 5 | 25 | 125 | .0 | 465 | 2000 |
| 7 | 23 | 62 | 21.0 | 6.6 | 8.5 | 2.2 | - | - | - | .3 | 80 | 140 | 328 | 5 | 88 | 376 | .0 | - | 3000 |
| 7 | 30 | 62 | 21.0 | 6.7 | 8.6 | 1.1 | - | - | - | 2.0 | 78 | 152 | 360 | - | 69 | 420 | .5 | - | 2100 |
| 8 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | 10 | - | - | .0 | - | - |
| 8 | 20 | 62 | 21.0 | - | 8.5 | - | - | - | - | 1.0 | 126 | 192 | 608 | - | 70 | 620 | .8 | 1237 | 12000 |
| 8 | 28 | 62 | 22.0 | 6.8 | 8.6 | 2.4 | - | - | - | 1.0 | 117 | 170 | 596 | 5 | 80 | 550 | .0 | 1272 | 8000 |
| 9 | 4 | 62 | 18.0 | 6.8 | 8.4 | 1.8 | 50 | - | - | 1.3 | 158 | 180 | 624 | 10 | 76 | 648 | .2 | 1411 | 25000 |

**MINOR BASIN** UPPER COLORADO RIVER

**STATION LOCATION** COLORADO RIVER AT

LOMA, COLORADO

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | 10 | 62 | 15.0 | 7.4 | 8.4 | 2.0 | - | - | - | 1.8 | 129 | 228 | 540 | 5 | 46 | 680 | .2 | 1505 | 33000 |
| 9 | 17 | 62 | 18.0 | 6.6 | 8.4 | 2.0 | 48 | - | - | 1.0 | 144 | 216 | 456 | - | 42 | 696 | .3 | 1462 | 18000 |
| 9 | 24 | 62 | 17.0 | 6.6 | 8.5 | 2.1 | - | - | - | .9 | 124 | 212 | 238 | - | 2000 | 620 | .3 | 1294 | 8500 |

STATION LOCATION COLUMBIA RIVER AT

CLATSKANIE, OREGON

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 1 |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS |
| 10 | 3 | 61 | 1000 | 0 | 0 | 40 | 0 | 40 | 20 | 580 | 270 | 290 | 20 | 71 | 1 | 69 | 1 | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 1700 | 0 | 0 | 100 | 0 | 20 | 0 | 1160 | 440 | 170 | 170 | 71 | 3 | 69 | 2 | 92 | 1 | | | | | | | | | | | | | |
| 11 | 7 | 61 | 1100 | 0 | 20 | 110 | 0 | 0 | 20 | 780 | 200 | 420 | 540 | 71 | 3 | | | | | | | | | | | | | | | | | |
| 11 | 27 | 61 | 1200 | 110 | 0 | 50 | 0 | 70 | 0 | 380 | 590 | 50 | 340 | 92 | 1 | | | | | | | | | | | | | | | | | |
| 12 | 5 | 61 | 1000 | 0 | 0 | 180 | 0 | 50 | 0 | 380 | 410 | 20 | 160 | 71 | 1 | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 1000 | 0 | 0 | 70 | 0 | 0 | 0 | 590 | 320 | 70 | 180 | 71 | 2 | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 600 | 0 | 0 | 20 | 0 | 20 | 0 | 160 | 360 | 0 | 70 | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 600 | 20 | 0 | 20 | 0 | 0 | 0 | 230 | 340 | 0 | 290 | 71 | 1 | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 600 | 0 | 20 | 0 | 0 | 20 | 0 | 250 | 320 | 20 | 20 | 71 | 1 | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 800 | 0 | 0 | 0 | 0 | 20 | 0 | 260 | 510 | 90 | 190 | 71 | 1 | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 2600 | 0 | 0 | 90 | 0 | 70 | 70 | 790 | 1560 | 380 | 320 | 77 | 3 | 71 | 3 | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 2500 | 0 | 0 | 0 | 0 | 130 | 230 | 540 | 1570 | 150 | 310 | 77 | 2 | 62 | 1 | 92 | 1 | 88 | 1 | 73 | 1 | | | | | | | | | |
| 4 | 16 | 62 | 1900 | 0 | 40 | 60 | 0 | 40 | 20 | 550 | 1160 | 930 | 630 | 92 | 2 | 71 | 2 | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 4700 | 0 | 0 | 40 | 0 | 60 | 0 | 2050 | 2550 | 190 | 410 | 71 | 4 | 77 | 2 | 92 | 2 | 88 | 1 | 69 | 1 | 87 | 1 | | | | | | | |
| 6 | 4 | 62 | 6800 | 0 | 0 | 20 | 0 | 270 | 0 | 2660 | 3800 | 1140 | 2240 | 71 | 4 | 77 | 4 | 69 | 3 | 92 | 2 | 88 | 2 | 82 | 2 | 68 | 1 | 57 | 1 | 84 | 1 | 87 |
| 6 | 18 | 62 | 5000 | 60 | 0 | 80 | 0 | 0 | 0 | 2530 | 2320 | 890 | 1520 | 71 | 4 | 77 | 4 | 69 | 2 | 92 | 2 | 84 | 1 | 93 | 1 | | | | | | | |
| 7 | 2 | 62 | 6800 | 0 | 0 | 40 | 0 | 40 | 40 | 3120 | 3500 | 1100 | 2280 | 69 | 4 | 77 | 4 | 84 | 4 | 93 | 1 | | | | | | | | | | | |
| 8 | 6 | 62 | 3600 | 0 | 40 | 60 | 40 | 0 | 0 | 1240 | 2190 | 290 | 80 | 77 | 4 | 92 | 3 | 69 | 3 | 71 | 2 | 84 | 1 | | | | | | | | | |
| 8 | 20 | 62 | 4700 | 0 | 0 | 110 | 0 | 0 | 0 | 3170 | 1390 | 1560 | 630 | 69 | 4 | 68 | 3 | 84 | 2 | 77 | 2 | 71 | 1 | 92 | 1 | 93 | 1 | | | | | |
| 9 | 4 | 62 | 110600 | 108030 | 40 | 290 | 0 | 0 | 0 | 1350 | 890 | 1440 | 550 | 4 | 9 | 71 | 3 | 69 | 2 | 77 | 2 | | | | | | | | | | | |
| 9 | 17 | 62 | 2000 | 80 | 0 | 160 | 40 | 80 | 0 | 810 | 790 | 210 | 0 | 69 | 3 | 77 | 1 | 92 | 1 | 71 | 1 | | | | | | | | | | | |

**STATION LOCATION** COLUMBIA RIVER AT
CLATSKANIE, OREGON 007

| DATE OF SAMPLE | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA *(Identifiable)* *Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable)* *Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* 1ST | | 2ND | | 3RD | | | |
| DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 3 | 61 | 47 | 25 | 56 | 22 | 58 | 14 | 92 | 8 | 31 | 0 | 0 | 643 | 17 | 7 | 22 | 6 | 11 | 5 | | | | | 4 | 51 | 1 | | | | | 0 | 0 |
| 16 | 61 | 92 | 25 | 82 | 14 | 58 | 12 | 47 | 12 | 37 | 0 | 20 | 186 | 11 | 4 | 17 | 4 | 21 | 3 | 22 | 1 | 13 | 1 | 1 | | | | | | | 0 | 0 |
| 7 | 61 | 82 | 21 | 58 | 13 | 9 | 12 | 92 | 11 | 43 | 0 | 0 | 14 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 27 | 61 | 92 | 32 | 47 | 20 | 58 | 7 | 83 | 3 | 38 | 160 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 61 | 92 | 22 | 47 | 14 | 58 | 13 | 56 | 6 | 45 | 140 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 18 | 61 | 92 | 17 | 82 | 9 | 47 | 8 | 58 | 8 | 58 | 70 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 62 | 92 | 26 | 47 | 10 | 58 | 6 | 62 | 5 | 53 | 140 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 15 | 62 | 92 | 16 | 47 | 15 | 80 | 8 | 9 | 7 | 54 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 62 | 82 | 12 | 92 | 10 | 80 | 9 | 2 | 6 | 63 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 62 | 92 | 17 | 9 | 13 | 36 | 9 | 58 | 7 | 54 | 20 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 19 | 62 | 9 | 29 | 92 | 18 | 47 | 8 | 58 | 6 | 39 | 110 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 2 | 62 | 9 | 20 | 92 | 8 | 62 | 5 | 58 | 5 | 62 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 16 | 62 | 92 | 19 | 47 | 9 | 62 | 7 | 58 | 7 | 58 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 7 | 62 | 80 | 38 | 92 | 8 | 61 | 5 | 47 | 4 | 45 | 0 | 0 | 5 | | | | | | | | | | | 2 | | | | | | | 1 | 0 |
| 4 | 62 | 61 | 24 | 9 | 23 | 47 | 11 | 95 | 7 | 35 | 20 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 18 | 62 | 61 | 26 | 47 | 19 | 80 | 16 | 95 | 13 | 26 | 0 | 0 | 13 | 11 | 2 | | | | | | | | | 6 | | | | | | | 0 | 0 |
| 2 | 62 | 61 | 38 | 47 | 27 | 45 | 8 | 95 | 8 | 19 | 0 | 0 | 55 | 11 | 3 | 15 | 1 | 22 | 1 | | | | | 4 | 50 | 1 | | | | | 0 | 0 |
| 6 | 62 | 58 | 32 | 47 | 24 | 61 | 22 | 92 | 9 | 13 | 0 | 0 | 337 | 11 | 5 | 22 | 5 | 17 | 5 | 46 | 3 | 21 | 1 | 1 | | | | | | | 0 | 0 |
| 20 | 62 | 58 | 50 | 47 | 27 | 9 | 10 | 27 | 4 | 9 | 0 | 0 | 1040 | 11 | 7 | 22 | 7 | 17 | 4 | 15 | 2 | 21 | 2 | 12 | 51 | 2 | 50 | 1 | 76 | 1 | 0 | 0 |
| 4 | 62 | 47 | 35 | 58 | 27 | 82 | 14 | 56 | 11 | 13 | 0 | 0 | 569 | 17 | 6 | 11 | 6 | 22 | 5 | 46 | 3 | 21 | 2 | 3 | 51 | 1 | | | | | 0 | 0 |
| 17 | 62 | 47 | 32 | 82 | 28 | 56 | 12 | 58 | 9 | 19 | 0 | 0 | 351 | 17 | 5 | 11 | 5 | 22 | 3 | 16 | 2 | 2 | 2 | 19 | 76 | 3 | 51 | 1 | 50 | 1 | 0 | 0 |

# RADIOACTIVITY DETERMINATIONS

**STATE** OREGON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** COLUMBIA RIVER BELOW YAKIMA RIVER
**STATION LOCATION** COLUMBIA RIVER AT
CLATSKANIE, OREGON

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g |
| 10 | 2 | 61 | 10 | 16 | - | - | - | - | - | - | 20 | 5 | 164 | 8 | 184 | 9 | | | | | |
| 10 | 9 | 61 | 10 | 30 | - | - | - | - | - | - | 10 | 5 | 133 | 8 | 143 | 9 | | | | | |
| 10 | 16 | 61 | 10 | 30 | - | - | - | - | - | - | 20 | 5 | 140 | 9 | 160 | 10 | | | | | |
| 10 | 22 | 61 | 11 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 10 | 6 | 181 | 9 | 191 | 11 | | | | | |
| 10 | 30 | 61 | 11 | 15 | - | - | - | - | - | - | 16 | 6 | 235 | 10 | 251 | 12 | | | | | |
| 11 | 6 | 61 | 11 | 21 | - | - | - | - | - | - | 6 | 5 | 136 | 8 | 142 | 9 | | | | | |
| 11 | 13 | 61 | 11 | 28 | - | - | - | - | - | - | 14 | 5 | 130 | 8 | 144 | 9 | | | | | |
| 11 | 20 | 61 | 12 | 4 | - | - | - | - | - | - | 14 | 5 | 180 | 8 | 194 | 9 | | | | | |
| 11 | 27 | 61 | 12 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 19 | 5 | 90 | 7 | 109 | 9 | | | | | |
| 12 | 5 | 61 | 12 | 27 | - | - | - | - | - | - | 19 | 5 | 75 | 6 | 94 | 8 | | | | | |
| 12 | 11 | 61 | 1 | 4 | - | - | - | - | - | - | 17 | 5 | 90 | 7 | 107 | 9 | | | | | |
| 12 | 26 | 61 | 1 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 5 | 57 | 5 | 102 | 7 | | | | | |
| 1 | 2 | 62 | 1 | 15 | - | - | - | - | - | - | 18 | 4 | 79 | 5 | 97 | 7 | | | | | |
| 1 | 8 | 62 | 1 | 24 | - | - | - | - | - | - | 18 | 5 | 103 | 7 | 121 | 8 | | | | | |
| 1 | 15 | 62 | 1 | 26 | - | - | - | - | - | - | 38 | 6 | 150 | 8 | 188 | 10 | | | | | |
| 2 | 15 | 62 | 2 | 27 | 0 | 1 | 0 | 1 | 0 | 1 | 30 | 4 | 143 | 7 | 173 | 8 | | | | | |
| 2 | 19 | 62 | 3 | 2 | - | - | - | - | - | - | 29 | 5 | 115 | 6 | 144 | 8 | | | | | |
| 2 | 26 | 62 | 3 | 12 | 0 | 0 | 0 | 1 | 0 | 1 | 23 | 4 | 154 | 8 | 177 | 9 | | | | | |
| 3 | 5 | 62 | 3 | 19 | - | - | - | - | - | - | 26 | 6 | 119 | 8 | 145 | 9 | | | | | |
| 3 | 12 | 62 | 3 | 26 | 0 | 0 | 0 | 1 | 0 | 1 | 19 | 5 | 97 | 7 | 118 | 9 | | | | | |
| 3 | 19 | 62 | 4 | 4 | - | - | - | - | - | - | 23 | 5 | 127 | 8 | 150 | 9 | | | | | |
| 3 | 26 | 62 | 4 | 16 | 0 | 0 | 1 | 1 | 1 | 1 | 19 | 7 | 136 | 7 | 155 | 10 | | | | | |
| 4 | 2 | 62 | 4 | 19 | - | - | - | - | - | - | 30 | 6 | 93 | 7 | 123 | 9 | | | | | |
| 5 | 1 | 62 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 54 | 6 | 27 | 5 | 81 | 8 | | | | | |
| 5 | 7 | 62 | 6 | 19 | - | - | - | - | - | - | 18 | 7 | 28 | 7 | 46 | 10 | | | | | |
| 5 | 14 | 62 | 6 | 22 | - | - | - | - | - | - | 31 | 7 | 28 | 7 | 59 | 10 | | | | | |
| 5 | 21 | 62 | 6 | 28 | - | - | - | - | - | - | 23 | 6 | 47 | 6 | 70 | 8 | | | | | |
| 5 | 28 | 62 | 7 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 27 | 6 | 41 | 6 | 68 | 8 | | | | | |
| 6 | 4 | 62 | 7 | 6 | - | - | - | - | - | - | 18 | 4 | 36 | 5 | 54 | 6 | | | | | |
| 6 | 11 | 62 | 7 | 10 | - | - | - | - | - | - | 35 | 6 | 52 | 8 | 87 | 10 | | | | | |
| 6 | 18 | 62 | 7 | 20 | - | - | - | - | - | - | 17 | 3 | 40 | 3 | 57 | 4 | | | | | |
| 8 | 13 | 62 | 9 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 21 | 3 | 139 | 5 | 160 | 6 | | | | | |
| 8 | 20 | 62 | 9 | 26 | - | - | - | - | - | - | 6 | 6 | 56 | 7 | 62 | 9 | | | | | |
| 8 | 27 | 62 | 9 | 17 | 0 | 0 | 0 | 1 | 0 | 1 | 16 | 5 | 120 | 8 | 136 | 9 | | | | | |
| 9 | 4 | 62 | 9 | 28 | - | - | - | - | - | - | 5 | 6 | 117 | 8 | 122 | 10 | | | | | |
| 9 | 10 | 62 | 10 | 9 | - | - | - | - | - | - | 13 | 5 | 106 | 8 | 119 | 9 | | | | | |
| 9 | 17 | 62 | 10 | 14 | - | - | - | - | - | - | 1 | 5 | 87 | 8 | 88 | 9 | | | | | |
| 9 | 24 | 62 | 10 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 95 | 6 | 101 | 7 | | | | | |

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**MINOR BASIN** COLUMBIA RIVER BELOW YAKIMA RIVER

**STATION LOCATION** COLUMBIA RIVER AT
CLATSKANIE, OREGON 7

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 3 | 61 | 10 | 13 | 5030 | 106 | 36 | 70 | 1 | 8 | 11 | 2 | 0 | 8 | 1 | 4 | 3 | 1 | 8 |
| 12 | 5 | 61 | 12 | 14 | 5160 | 92 | 35 | 57 | 1 | 9 | 10 | 1 | 1 | 8 | 0 | 6 | 2 | 0 | 7 |
| 1 | 3 | 62 | 1 | 12 | 5150 | 100 | 30 | 70 | 2 | 6 | 9 | 3 | 1 | 5 | 0 | 5 | 2 | 0 | 6 |
| 2 | 6 | 62 | 2 | 16 | 4450 | 108 | 32 | 76 | 1 | 6 | 9 | 1 | 1 | 6 | 1 | 6 | 2 | 0 | 8 |
| 3 | 6 | 62 | 3 | 16 | 6240 | 85 | 36 | 49 | 1 | 7 | 12 | 2 | 1 | 7 | 2 | 5 | 4 | 0 | 7 |
| 4 | 13 | 62 | 4 | 23 | 5560 | 90 | 38 | 52 | 3 | 9 | 10 | 2 | 1 | 7 | 0 | 5 | 3 | 1 | 7 |
| 5 | 1 | 62 | 5 | 18 | 3880 | 130 | 63 | 67 | 3 | 18 | 16 | 2 | 2 | 11 | 1 | 8 | 8 | 1 | 9 |
| 6 | 12 | 62 | 6 | 28 | 3090 | 147 | 63 | 84 | 2 | 21 | 12 | 2 | 1 | 9 | 0 | 11 | 6 | 1 | 10 |
| 8 | 20 | 62 | 9 | 4 | 2930 | 159 | 52 | 107 | 1 | 13 | 17 | 2 | 2 | 13 | 0 | 6 | 4 | 1 | 10 |
| 9 | 20 | 62 | 10 | 3 | 3290# | 117 | 39 | 78 | 0 | 8 | 18 | 4 | 3 | 11 | 0 | 4 | 2 | 1 | 6 |

# ESTIMATED

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | - | - | 7.1 | - | - | - | - | - | 10 | - | - | 10 | 0 | 25 | - | - | - |
| 10 | 3 | 61 | - | - | - | - | 30 | - | - | - | - | - | - | - | - | - | - | - | 3700 |
| 10 | 9 | 61 | - | - | 7.9 | - | - | - | - | - | - | 66 | - | 10 | - | - | .0 | - | - |
| 10 | 22 | 61 | - | - | - | - | - | - | - | - | 9 | 62 | 68 | 5 | 0 | 22 | .0 | - | - |
| 10 | 30 | 61 | - | - | - | - | - | - | - | - | 8 | 58 | 76 | 5 | - | - | .0 | - | - |
| 11 | 6 | 61 | - | - | 7.7 | - | - | - | - | - | 8 | 56 | 76 | 10 | - | 20 | - | - | - |
| 11 | 7 | 61 | - | 10.1 | 7.2 | 1.3 | 9 | - | - | .0 | 8 | 37 | - | 8 | 4 | 14 | .0 | 97 | - |
| 11 | 13 | 61 | - | - | - | - | - | - | - | - | 8 | 32 | 68 | 5 | - | 17 | - | - | - |
| 11 | 20 | 61 | 7.7 | - | 7.7 | - | - | - | - | - | - | - | - | - | - | 24 | .1 | 105 | - |
| 11 | 27 | 61 | - | - | - | - | - | - | - | - | 5 | 34 | 36 | - | - | 9 | - | - | 4000 |
| 12 | 5 | 61 | - | - | 7.2 | 1.6 | 13 | - | - | .6 | 3 | 44 | 86 | 8 | 5 | 8 | .2 | 106 | - |
| 12 | 11 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 15 | - | 68 | - |
| 12 | 26 | 61 | - | - | - | - | - | - | - | - | 6 | 22 | 28 | - | - | - | - | - | - |
| 1 | 2 | 62 | - | - | 7.5 | - | - | - | - | - | - | - | 80 | 10 | - | - | .0 | - | - |
| 1 | 3 | 62 | - | 11.9 | 7.7 | 2.1 | 37 | - | - | .6 | 3 | 40 | 54 | 10 | 9 | 9 | .1 | 90 | 2600 |
| 1 | 8 | 62 | - | - | 7.4 | - | - | - | - | - | 6 | - | - | 5 | - | 18 | - | - | - |
| 1 | 12 | 62 | - | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 15 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 19 | - | - | - |
| 2 | 6 | 62 | 5.0 | 13.0 | 7.5 | 2.7 | - | - | - | .6 | 6 | 53 | 84 | 4 | 5 | 11 | .1 | 127 | 340 |
| 2 | 9 | 62 | - | - | - | - | 13 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 15 | - | - | - |
| 2 | 19 | 62 | - | - | - | - | - | - | - | - | 5 | - | - | 15 | - | - | - | - | - |
| 3 | 6 | 62 | 5.3 | 12.2 | 7.2 | 2.4 | - | .9 | 6.2 | .5 | 4 | 51 | 66 | 5 | 16 | 12 | .0 | 111 | 4100 |
| 3 | 26 | 62 | - | - | - | - | - | - | - | - | 6 | 64 | 64 | 5 | - | 19 | .0 | - | - |
| 4 | 2 | 62 | - | - | - | - | - | - | - | - | 7 | - | 64 | 0 | - | 25 | - | - | - |
| 4 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1100 |
| 4 | 13 | 62 | - | - | - | - | 67 | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 7 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 15 | .0 | - | - |
| 5 | 14 | 62 | - | - | - | - | - | - | - | - | 5 | - | - | - | - | 15 | .0 | - | - |
| 5 | 21 | 62 | - | - | - | - | 16 | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 12 | 62 | - | - | - | - | 9 | - | - | - | - | - | - | - | - | - | - | - | 3500 |
| 8 | 8 | 62 | - | - | - | - | 12 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1600 |
| 9 | 4 | 62 | - | - | - | - | 11 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 470 |
| 9 | 24 | 62 | - | - | 7.9 | - | - | - | - | - | 6 | 60 | 72 | 5 | *25 | 19 | - | 115 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Clatskanie, Oregon
Data Supplied by U.S. Geological Survey

STATE Oregon

MAJOR BASIN Pacific Northwest

MINOR BASIN Columbia River below Yakima River

STATION LOCATION Columbia River at
Clatskanie, Oregon

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 103.000 | 147.000 | 203.000 | 215.000 | 180.000 | 172.000 | 215.000 | 362.000 | 506.000 | 340.000 | 229.000 | 137.000 |
| 2 | 100.000 | 138.000 | 203.000 | 204.000 | 178.000 | 161.000 | 221.000 | 360.000 | 512.000 | 341.000 | 229.000 | 134.000 |
| 3 | 104.000 | 136.000 | 195.000 | 222.000 | 184.000 | 133.000 | 203.000 | 364.000 | 530.000 | 328.000 | 235.000 | 134.000 |
| 4 | 108.000 | 142.000 | 181.000 | 268.000 | 196.000 | 173.000 | 204.000 | 374.000 | 520.000 | 319.000 | 240.000 | 129.000 |
| 5 | 105.000 | 147.000 | 206.000 | 253.000 | 190.000 | 182.000 | 233.000 | 375.000 | 529.000 | 321.000 | 235.000 | 129.000 |
| 6 | 98.000 | 143.000 | 203.000 | 239.000 | 188.000 | 182.000 | 250.000 | 368.000 | 506.000 | 316.000 | 234.000 | 124.000 |
| 7 | 100.000 | 134.000 | 193.000 | 261.000 | 189.000 | 170.000 | 280.000 | 345.000 | 486.000 | 320.000 | 218.000 | 123.000 |
| 8 | 101.000 | 132.000 | 180.000 | 277.000 | 192.000 | 170.000 | 432.000 | 351.000 | 465.000 | 316.000 | 214.000 | 125.000 |
| 9 | 105.000 | 123.000 | 168.000 | 287.000 | 194.000 | 171.000 | 448.000 | 365.000 | 455.000 | 309.000 | 217.000 | 110.000 |
| 10 | 103.000 | 125.000 | 159.000 | 300.000 | 204.000 | 168.000 | 396.000 | 374.000 | 454.000 | 305.000 | 209.000 | 112.000 |
| 11 | 123.000 | 134.000 | 150.000 | 267.000 | 208.000 | 171.000 | 339.000 | 405.000 | 468.000 | 292.000 | 195.000 | 126.000 |
| 12 | 130.000 | 135.000 | 146.000 | 238.000 | 197.000 | 171.000 | 301.000 | 406.000 | 471.000 | 283.000 | 183.000 | 124.000 |
| 13 | 139.000 | 135.000 | 145.000 | 226.000 | 205.000 | 164.000 | 299.000 | 382.000 | 482.000 | 279.000 | 173.000 | 121.000 |
| 14 | 135.000 | 130.000 | 140.000 | 207.000 | 224.000 | 157.000 | 278.000 | 379.000 | 451.000 | 263.000 | 183.000 | 123.000 |
| 15 | 124.000 | 135.000 | 140.000 | 195.000 | 237.000 | 150.000 | 244.000 | 368.000 | 456.000 | 257.000 | 163.000 | 118.000 |
| 16 | 121.000 | 133.000 | 149.000 | 185.000 | 221.000 | 146.000 | 267.000 | 367.000 | 409.000 | 257.000 | 160.000 | 114.000 |
| 17 | 115.000 | 134.000 | 198.000 | 184.000 | 216.000 | 151.000 | 280.000 | 337.000 | 452.000 | 259.000 | 160.000 | 109.000 |
| 18 | 111.000 | 137.000 | 208.000 | 192.000 | 216.000 | 147.000 | 282.000 | 325.000 | 442.000 | 257.000 | 159.000 | 117.000 |
| 19 | 117.000 | 120.000 | 203.000 | 184.000 | 209.000 | 144.000 | 308.000 | 330.000 | 441.000 | 251.000 | 160.000 | 122.000 |
| 20 | 125.000 | 116.000 | 298.000 | 180.000 | 202.000 | 143.000 | 367.000 | 327.000 | 418.000 | 254.000 | 154.000 | 117.000 |
| 21 | 129.000 | 121.000 | 401.000 | 165.000 | 191.000 | 157.000 | 365.000 | 328.000 | 412.000 | 239.000 | 148.000 | 122.000 |
| 22 | 128.000 | 163.000 | 358.000 | 165.000 | 193.000 | 179.000 | 375.000 | 328.000 | 411.000 | 238.000 | 156.000 | 108.000 |
| 23 | 120.000 | 225.000 | 323.000 | 157.000 | 211.000 | 186.000 | 360.000 | 328.000 | 415.000 | 232.000 | 160.000 | 105.000 |
| 24 | 131.000 | 229.000 | 354.000 | 159.000 | 180.000 | 200.000 | 351.000 | 337.000 | 409.000 | 219.000 | 161.000 | 103.000 |
| 25 | 145.000 | 186.000 | 380.000 | 166.000 | 182.000 | 245.000 | 353.000 | 384.000 | 404.000 | 222.000 | 157.000 | 98.800 |
| 26 | 135.000 | 189.000 | 316.000 | 184.000 | 184.000 | 286.000 | 356.000 | 433.000 | 402.000 | 225.000 | 154.000 | 106.000 |
| 27 | 153.000 | 214.000 | 278.000 | 185.000 | 165.000 | 330.000 | 377.000 | 470.000 | 393.000 | 215.000 | 154.000 | 115.000 |
| 28 | 159.000 | 191.000 | 252.000 | 188.000 | 139.000 | 329.000 | 440.000 | 482.000 | 376.000 | 216.000 | 152.000 | 118.000 |
| 29 | 164.000 | 204.000 | 250.000 | 187.000 |  | 313.000 | 419.000 | 498.000 | 357.000 | 212.000 | 154.000 | 121.000 |
| 30 | 148.000 | 196.000 | 251.000 | 188.000 |  | 268.000 | 390.000 | 517.000 | 346.000 | 218.000 | 143.000 | 120.000 |
| 31 | 156.000 |  | 239.000 | 182.000 |  | 236.000 |  | 511.000 |  | 220.000 | 140.000 |  |

Computed as sum of Columbia River near The Dalles, Oregon plus 4 times the sum of Klickitat River near Pitt, Washington and Hood River and Conduit near Hood River, Oregon, plus Willamette River at Salem, Oregon plus 4.5 times the Cowlitz River at Castle Rock, Washington.

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 9 | 61 | 1900 | 40 | 20 | 210 | 0 | 0 | 0 | 1350 | 310 | 1010 | 170 | 71 | 3 | 69 | 1 | 68 | 1 | | | | | | | | | | | | | | |
| 10 | 23 | 61 | 1900 | 20 | 0 | 150 | 0 | 0 | 0 | 1470 | 310 | 540 | 230 | 71 | 3 | 69 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 500 | 0 | 0 | 70 | 0 | 0 | 0 | 400 | 70 | 270 | 360 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 2800 | 250 | 0 | 540 | 0 | 0 | 20 | 1710 | 320 | 410 | 430 | 71 | 4 | 69 | 1 | 25 | 1 | 3 | 1 | | | | | | | | | | | | |
| 12 | 11 | 61 | 1200 | 50 | 0 | 270 | 0 | 0 | 20 | 230 | 680 | 160 | 200 | 25 | 1 | | | | | | | | | | | | | | | | | | |
| 12 | 26 | 61 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 230 | 80 | 120 | | | | | | | | | | | | | | | | | | | | |
| 1 | 8 | 62 | 600 | 0 | 0 | 20 | 0 | 0 | 0 | 230 | 390 | 20 | 100 | | | | | | | | | | | | | | | | | | | | |
| 1 | 22 | 62 | 600 | 0 | 0 | 20 | 0 | 0 | 0 | 210 | 410 | 20 | 120 | | | | | | | | | | | | | | | | | | | | |
| 2 | 12 | 62 | 1900 | 0 | 0 | 60 | 0 | 60 | 0 | 890 | 850 | 100 | 100 | 71 | 1 | 92 | 1 | 88 | 1 | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 1000 | 0 | 0 | 0 | 0 | 50 | 0 | 230 | 700 | 20 | 410 | 77 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 1700 | 40 | 0 | 40 | 0 | 20 | 60 | 580 | 990 | 100 | 80 | 71 | 2 | 77 | 2 | 92 | 1 | 88 | 1 | | | | | | | | | | | | |
| 3 | 19 | 62 | 2900 | 20 | 0 | 50 | 0 | 90 | 0 | 700 | 2010 | 500 | 410 | 77 | 4 | 71 | 2 | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 2300 | 0 | 0 | 20 | 0 | 80 | 0 | 390 | 1840 | 210 | 330 | 77 | 2 | 92 | 1 | 88 | 1 | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 490 | 990 | 550 | 820 | 71 | 2 | 92 | 2 | 88 | 1 | | | | | | | | | | | | | | |
| 5 | 14 | 62 | 13200 | 20 | 190 | 60 | 0 | 630 | 0 | 3230 | 9070 | 1600 | 2680 | 92 | 5 | 71 | 5 | 77 | 4 | 85 | 3 | 69 | 3 | 81 | 2 | 80 | 2 | 82 | 2 | 87 | 2 | 88 | 2 |
| 5 | 28 | 62 | 7100 | 0 | 0 | 60 | 0 | 20 | 0 | 2260 | 4770 | 1140 | 3020 | 77 | 4 | 71 | 4 | 92 | 4 | 69 | 3 | 82 | 3 | 88 | 2 | 84 | 1 | | | | | | |
| 6 | 11 | 62 | 7500 | 0 | 0 | 60 | 0 | 80 | 0 | 2300 | 5100 | 500 | 440 | 77 | 5 | 71 | 4 | 69 | 3 | 92 | 3 | 87 | 2 | 82 | 1 | 85 | 1 | 84 | 1 | 93 | 1 | | |
| 6 | 25 | 62 | 6200 | 0 | 150 | 20 | 0 | 20 | 0 | 3000 | 3020 | 970 | 2070 | 77 | 4 | 71 | 4 | 69 | 3 | 92 | 2 | 93 | 1 | 82 | 1 | | | | | | | | |
| 7 | 9 | 62 | 7300 | 370 | 0 | 40 | 80 | 120 | 0 | 1990 | 4720 | 540 | 700 | 77 | 5 | 71 | 3 | 69 | 3 | 92 | 3 | 68 | 2 | 93 | 2 | 87 | 1 | 82 | 1 | | | | |
| 7 | 23 | 62 | 4900 | 20 | 0 | 90 | 0 | 20 | 0 | 1080 | 3740 | 1370 | 1130 | 77 | 5 | 69 | 2 | 93 | 2 | 71 | 1 | 70 | 1 | 84 | 1 | | | | | | | | |
| 8 | 6 | 62 | 4500 | 0 | 100 | 0 | 0 | 0 | 40 | 1900 | 2440 | 210 | 580 | 77 | 3 | 69 | 3 | 68 | 2 | 71 | 2 | 92 | 2 | 84 | 1 | | | | | | | | |
| 8 | 20 | 62 | 3200 | 0 | 40 | 150 | 0 | 0 | 0 | 1690 | 1370 | 1180 | 930 | 69 | 3 | 84 | 2 | 77 | 2 | 92 | 2 | 71 | 1 | 68 | 1 | | | | | | | | |
| 9 | 4 | 62 | 2400 | 0 | 60 | 80 | 0 | 40 | 40 | 950 | 1180 | 620 | 250 | 69 | 2 | 77 | 1 | 84 | 1 | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 200 | 10 | 0 | 40 | 0 | 0 | 0 | 90 | 70 | 200 | 280 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| | | | | | | | | | | | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 9 | 61 | 82 | 33 | 47 | 25 | 92 | 17 | 58 | 6 | 19 | 0 | 10 | 56 | 11 | 3 | 17 | 2 | 22 | 1 | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 23 | 61 | 92 | 26 | 82 | 14 | 58 | 13 | 47 | 9 | 38 | 40 | 10 | 20 | 11 | 2 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 82 | 19 | 58 | 16 | 47 | 13 | 92 | 11 | 41 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 82 | 24 | 58 | 20 | 92 | 11 | 47 | 7 | 38 | 360 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 11 | 61 | 36 | 11 | 58 | 10 | 47 | 9 | 92 | 9 | 61 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 26 | 61 | 92 | 22 | 36 | 10 | 80 | 7 | 47 | 6 | 55 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 1 | 8 | 62 | 36 | 12 | 58 | 7 | 92 | 6 | 47 | 6 | 69 | 0 | 10 | 0 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 1 | 22 | 62 | 92 | 13 | 36 | 11 | 71 | 10 | 64 | 5 | 61 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 12 | 62 | 92 | 13 | 70 | 11 | 82 | 8 | 47 | 7 | 61 | 60 | 0 | 7 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 9 | 15 | 92 | 8 | 47 | 5 | 82 | 5 | 67 | 0 | 0 | 0 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 9 | 24 | 92 | 17 | 71 | 7 | 58 | 4 | 48 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 9 | 56 | 82 | 6 | 92 | 3 | 47 | 3 | 32 | 0 | 10 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 92 | 14 | 9 | 12 | 47 | 5 | 2 | 5 | 64 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 4 | 16 | 62 | 92 | 23 | 9 | 8 | 2 | 6 | 82 | 5 | 58 | 0 | 10 | 6 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 5 | 14 | 62 | 80 | 41 | 92 | 15 | 47 | 13 | 61 | 12 | 19 | 20 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 28 | 62 | 61 | 34 | 47 | 16 | 92 | 14 | 9 | 11 | 25 | 0 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 11 | 62 | 61 | 40 | 9 | 19 | 95 | 19 | 47 | 9 | 13 | 0 | 10 | 8 | 11 | 1 | | | | | | | | | 1 | | | | | | | 0 | 1 |
| 6 | 25 | 62 | 61 | 27 | 47 | 23 | 95 | 13 | 80 | 11 | 26 | 0 | 0 | 7 | 11 | 1 | | | | | | | | | 1 | | | | | | | 1 | 1 |
| 7 | 9 | 62 | 61 | 32 | 47 | 16 | 80 | 11 | 9 | 9 | 32 | 0 | 10 | 3 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 7 | 23 | 62 | 9 | 34 | 47 | 21 | 82 | 10 | 61 | 8 | 27 | 20 | 0 | 117 | 11 | 5 | 15 | 1 | | | | | | | 2 | | | | | | | 2 | 0 |
| 8 | 6 | 62 | 47 | 32 | 58 | 30 | 92 | 9 | 60 | 5 | 24 | 0 | 0 | 243 | 11 | 6 | 17 | 4 | 22 | 2 | 21 | 1 | 16 | 1 | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 58 | 44 | 47 | 40 | 9 | 5 | 92 | 3 | 8 | 0 | 0 | 648 | 11 | 7 | 22 | 6 | 17 | 5 | 21 | 2 | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 58 | 32 | 82 | 28 | 47 | 18 | 92 | 4 | 18 | 0 | 0 | 234 | 11 | 5 | 17 | 4 | 22 | 3 | 16 | 2 | 21 | 1 | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 47 | 28 | 82 | 23 | 58 | 13 | 80 | 8 | 28 | 0 | 0 | 150 | 17 | 4 | 11 | 4 | 22 | 3 | | | | | 6 | 50 | 1 | 76 | 1 | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** OREGON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** COLUMBIA RIVER BELOW YAKIMA RIVER
**STATION LOCATION** COLUMBIA RIVER AT
BONNEVILLE, OREGON 8

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 9 | 61 | 10 | 25 | - | - | - | - | - | - | 11 | 4 | 189 | 8 | 200 | 9 | | | | | | |
| 10 | 23 | 61 | 11 | 6 | 0 | 0 | 1 | 1 | 1 | 1 | 20 | 4 | 421 | 11 | 441 | 12 | | | | | | |
| 11 | 6 | 61 | 11 | 21 | - | - | - | - | - | - | 14 | 5 | 147 | 8 | 161 | 9 | | | | | | |
| 11 | 20 | 61 | 12 | 1 | - | - | - | - | - | - | 26 | 5 | 351 | 10 | 377 | 11 | | | | | | |
| 12 | 11 | 61 | 12 | 22 | - | - | - | - | - | - | 29 | 6 | 423 | 11 | 452 | 13 | | | | | | |
| 12 | 26 | 61 | 1 | 11 | 0 | 1 | 1 | 1 | 1 | 1 | 46 | 5 | 327 | 9 | 373 | 10 | | | | | | |
| 1 | 8 | 62 | 1 | 18 | 0 | 1 | 1 | 1 | 1 | 1 | 43 | 5 | 382 | 10 | 425 | 11 | | | | | | |
| 1 | 22 | 62 | 2 | 5 | 0 | 0 | 0 | 1 | 0 | 1 | 73 | 5 | 281 | 9 | 354 | 10 | | | | | | |
| 2 | 12 | 62 | 2 | 27 | - | - | - | - | - | - | 29 | 6 | 305 | 10 | 334 | 12 | | | | | | |
| 2 | 19 | 62 | 3 | 7 | 0 | 1 | 0 | 1 | 0 | 1 | 30 | 4 | 226 | 8 | 256 | 9 | | | | | | |
| 3 | 5 | 62 | 3 | 19 | - | - | - | - | - | - | 48 | 6 | 226 | 9 | 274 | 11 | | | | | | |
| 3 | 19 | 62 | 4 | 4 | 0 | 0 | 2 | 1 | 2 | 1 | 26 | 5 | 258 | 9 | 284 | 10 | | | | | | |
| 4 | 2 | 62 | 4 | 19 | - | - | - | - | - | - | 34 | 5 | 267 | 9 | 301 | 10 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 51 | 7 | 99 | 8 | 150 | 11 | | | | | | |
| 5 | 14 | 62 | 6 | 22 | - | - | - | - | - | - | 29 | 6 | 66 | 8 | 95 | 10 | | | | | | |
| 5 | 28 | 62 | 7 | 2 | 1 | 2 | 0 | 2 | 1 | 3 | 49 | 10 | 82 | 8 | 131 | 13 | | | | | | |
| 6 | 11 | 62 | 7 | 16 | - | - | - | - | - | - | 28 | 6 | 65 | 8 | 93 | 10 | | | | | | |
| 6 | 25 | 62 | 7 | 24 | 0 | 1 | 0 | 1 | 0 | 1 | 14 | 5 | 76 | 7 | 90 | 9 | | | | | | |
| 7 | 9 | 62 | 8 | 7 | - | - | - | - | - | - | 20 | 5 | 81 | 7 | 101 | 8 | | | | | | |
| 7 | 23 | 62 | 8 | 21 | 0 | 1 | 0 | 1 | 0 | 1 | 18 | 5 | 81 | 7 | 99 | 8 | | | | | | |
| 8 | 6 | 62 | 8 | 27 | - | - | - | - | - | - | 23 | 3 | 181 | 5 | 204 | 6 | | | | | | |
| 8 | 20 | 62 | 9 | 6 | - | - | - | - | - | - | 18 | 5 | 187 | 10 | 205 | 11 | | | | | | |
| 9 | 4 | 62 | 10 | 1 | - | - | - | - | - | - | 9 | 6 | 118 | 8 | 127 | 10 | | | | | | |
| 9 | 17 | 62 | 10 | 16 | - | - | - | - | - | - | 9 | 5 | 136 | 9 | 145 | 10 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** OREGON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** COLUMBIA RIVER BELOW YAKIMA RIVER
**STATION LOCATION** COLUMBIA RIVER AT
BONNEVILLE, OREGON 8

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 10 | 10 | 61 | 10 | 16 | 5010 | 57 | 15 | 42 | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 6 | 61 | 11 | 20 | 4841 | 64 | 18 | 46 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 11 | 61 | 12 | 26 | 5222 | 71 | 18 | 53 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 11 | 61 | | * | 15073 | 64 | 17 | 47 | 1 | 4 | 7 | 1 | 1 | 5 | 0 | 2 | 1 | 0 | 2 |
| 1 | 8 | 62 | 1 | 22 | 5192 | 90 | 14 | 76 | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 12 | 62 | 2 | 19 | 3511 | 66 | 21 | 45 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 5 | 62 | 3 | 12 | 3312 | 90 | 16 | 74 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 5 | 62 | | * | 12015 | 83 | 17 | 66 | 0 | 4 | 6 | 1 | 1 | 4 | 0 | 2 | 1 | 0 | 4 |
| 4 | 2 | 62 | 4 | 16 | 3994 | 105 | 35 | 70 | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 15 | 62 | 5 | 28 | 2814 | 118 | 49 | 69 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 11 | 62 | 6 | 22 | 4358 | 71 | 32 | 39 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 11 | 62 | | * | 11166 | 95 | 37 | 58 | 1 | 11 | 11 | 2 | 1 | 8 | 0 | 5 | 3 | 1 | 5 |
| 7 | 9 | 62 | 7 | 18 | 4790 | 45 | 14 | 31 | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 6 | 62 | 8 | 20 | 5052 | 57 | 14 | 43 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 4 | 62 | 9 | 17 | 3036 | 121 | 37 | 84 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 4 | 62 | | * | 12878 | 67 | 19 | 48 | 1 | 5 | 7 | 1 | 1 | 5 | 0 | 3 | 1 | 0 | 2 |

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MINOR BASIN** COLUMBIA RIVER BELOW YAKIMA RIVER

**STATION LOCATION** COLUMBIA RIVER AT
BONNEVILLE, OREGON

8

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 3 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3700 |
| 10 | 9 | 61 | 15.0 | 8.9 | 8.5 | .9 | 3 | .7 | 2.3 | .2 | 5 | 71 | 77 | 5 | 5 | 16 | .0 | 127 | *1 |
| 10 | 23 | 61 | 13.5 | 9.4 | 8.3 | 1.1 | 15 | .8 | 2.2 | .2 | 5 | 69 | 77 | 2 | 5 | 17 | .0 | 138 | *1 |
| 11 | 6 | 61 | 10.2 | 10.0 | 8.2 | 1.0 | 11 | .5 | 2.3 | .2 | 5 | 71 | 76 | 3 | 5 | 16 | .0 | 109 | *20 |
| 11 | 20 | 61 | 8.2 | 10.7 | 8.2 | .9 | 15 | .7 | 2.0 | .2 | 5 | 71 | 78 | 5 | 5 | 16 | .0 | 130 | *5 |
| 12 | 11 | 61 | 6.2 | 11.1 | 8.1 | .9 | 12 | .6 | 1.3 | .2 | 4 | 66 | 72 | 5 | 5 | 16 | .0 | 130 | - |
| 12 | 12 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *1 |
| 12 | 26 | 61 | 5.7 | 11.5 | 8.0 | 1.1 | 13 | .6 | 2.2 | .2 | 5 | 62 | 69 | 5 | 30 | 15 | .1 | 116 | 12 |
| 1 | 8 | 62 | 6.8 | 11.3 | 8.1 | .5 | 23 | 1.1 | 2.4 | .2 | 6 | 71 | 75 | 5 | 5 | 16 | .0 | 150 | *1 |
| 1 | 22 | 62 | 2.0 | 12.5 | 8.0 | 1.0 | 6 | .7 | 1.7 | .2 | 6 | 70 | 74 | 5 | 15 | 17 | .1 | 129 | - |
| 2 | 12 | 62 | 5.0 | 12.6 | 8.2 | 1.3 | 14 | .7 | 1.5 | .2 | 5 | 73 | 77 | 5 | 15 | 17 | .1 | 138 | *1 |
| 2 | 19 | 62 | 5.5 | 12.7 | 8.2 | .6 | 8 | .5 | 1.4 | .2 | 6 | 71 | 77 | 5 | 15 | 16 | .0 | 123 | 90 |
| 3 | 5 | 62 | 4.5 | 12.1 | 8.1 | 1.1 | 19 | .5 | 1.8 | .2 | 6 | 68 | 72 | 5 | 10 | 15 | .1 | 129 | 5 |
| 3 | 12 | 62 | - | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 19 | 62 | 5.8 | 12.2 | 8.1 | .8 | 8 | .5 | 1.5 | .2 | 5 | 78 | 86 | 5 | 5 | 18 | .1 | 143 | *1 |
| 4 | 2 | 62 | 8.3 | 10.9 | 8.0 | 1.2 | 12 | .9 | 2.0 | .2 | 4 | 71 | 79 | 10 | 20 | 16 | .1 | 139 | *1 |
| 4 | 16 | 62 | 10.4 | 11.1 | 8.0 | .8 | 16 | 1.3 | 2.4 | .2 | 4 | 59 | 61 | 10 | 25 | 13 | .1 | 115 | *5 |
| 4 | 30 | 62 | 10.1 | 11.7 | 8.1 | 1.8 | 13 | 1.3 | 2.2 | .1 | 3 | 54 | 62 | 5 | 20 | 12 | .1 | 97 | - |
| 5 | 14 | 62 | 11.7 | 11.7 | 8.3 | 1.7 | 27 | 1.1 | 2.2 | .2 | 2 | 53 | 57 | 5 | 20 | 11 | .0 | 86 | 7 |
| 5 | 28 | 62 | 13.1 | 11.3 | 8.2 | 1.2 | 21 | 1.1 | 2.3 | .2 | 1 | 49 | 53 | 5 | 30 | 10 | .0 | 88 | - |
| 6 | 11 | 62 | 14.3 | 11.3 | 8.2 | 1.3 | 13 | 1.1 | 2.1 | .2 | 1 | 49 | 54 | 5 | 20 | 11 | .0 | 68 | - |
| 6 | 25 | 62 | 17.0 | 10.7 | 8.2 | .9 | 13 | 1.4 | 2.0 | .3 | 2 | 46 | 50 | 0 | 10 | 10 | .0 | 63 | *5 |
| 7 | 9 | 62 | - | 10.3 | 8.3 | .7 | 9 | 1.1 | 2.0 | .1 | 2 | 51 | 58 | 5 | 15 | 10 | .0 | 83 | - |
| 7 | 16 | 62 | - | - | - | - | 11 | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 23 | 62 | 19.5 | 9.7 | 8.4 | .4 | 9 | .9 | 1.8 | .2 | 1 | 52 | 58 | 5 | 10 | 10 | .0 | 68 | 15 |
| 8 | 6 | 62 | 21.0 | 8.9 | 8.4 | 1.2 | 12 | .9 | 1.8 | .2 | 2 | 54 | 61 | 5 | 10 | 11 | .0 | 80 | 26 |
| 8 | 20 | 62 | 20.8 | 8.9 | 8.4 | 1.4 | 9 | .7 | 1.4 | .2 | 2 | 58 | 64 | 5 | 5 | 12 | .0 | 96 | 5 |
| 9 | 4 | 62 | 19.3 | 8.5 | 8.3 | .5 | 11 | .5 | 1.6 | .2 | 2 | 60 | 64 | 5 | 5 | 12 | .0 | 103 | 3 |
| 9 | 17 | 62 | 17.7 | 8.7 | 8.3 | 1.0 | 15 | .7 | 1.6 | .2 | 3 | 62 | 64 | 5 | 5 | 13 | .0 | 95 | - |
| 9 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 120 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Bonneville, Oregon
Supplied by U.S. Geological Survey

STATE Oregon
MAJOR BASIN Pacific Northwest
MINOR BASIN Columbia River below Yakima River
STATION LOCATION Columbia River at Bonneville, Oregon

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 86.700 | 111.000 | 93.400 | 85.400 | 124.000 | 127.000 | 129.000 | 267.000 | 429.000 | 295.000 | 205.000 | 119.000 |
| 2 | 84.900 | 100.000 | 93.300 | 87.000 | 123.000 | 117.000 | 135.000 | 264.000 | 440.000 | 298.000 | 206.000 | 116.000 |
| 3 | 88.300 | 97.100 | 95.300 | 92.000 | 127.000 | 88.100 | 123.000 | 263.000 | 450.000 | 290.000 | 212.000 | 116.000 |
| 4 | 92.000 | 97.000 | 93.900 | 89.200 | 134.000 | 126.000 | 130.000 | 259.000 | 445.000 | 284.000 | 213.000 | 111.000 |
| 5 | 89.700 | 104.000 | 99.700 | 91.700 | 130.000 | 120.000 | 158.000 | 261.000 | 458.000 | 285.000 | 207.000 | 112.000 |
| 6 | 81.400 | 102.000 | 101.000 | 91.000 | 132.000 | 108.000 | 167.000 | 266.000 | 440.000 | 281.000 | 205.000 | 107.000 |
| 7 | 80.600 | 98.400 | 106.000 | 95.200 | 134.000 | 98.400 | 193.000 | 250.000 | 424.000 | 285.000 | 190.000 | 106.000 |
| 8 | 81.400 | 98.200 | 101.000 | 97.100 | 136.000 | 101.000 | 232.000 | 260.000 | 405.000 | 283.000 | 186.000 | 108.000 |
| 9 | 85.400 | 91.300 | 96.500 | 108.000 | 135.000 | 104.000 | 252.000 | 273.000 | 391.000 | 276.000 | 189.000 | 93.000 |
| 10 | 82.800 | 93.400 | 95.600 | 146.000 | 139.000 | 106.000 | 241.000 | 276.000 | 385.000 | 270.000 | 183.000 | 95.200 |
| 11 | 91.900 | 94.300 | 92.400 | 140.000 | 139.000 | 112.000 | 209.000 | 306.000 | 398.000 | 257.000 | 170.000 | 106.000 |
| 12 | 96.600 | 90.400 | 95.300 | 130.000 | 131.000 | 113.000 | 189.000 | 319.000 | 408.000 | 248.000 | 159.000 | 102.000 |
| 13 | 101.000 | 93.300 | 95.000 | 130.000 | 143.000 | 112.000 | 199.000 | 291.000 | 422.000 | 245.000 | 150.000 | 98.900 |
| 14 | 93.900 | 91.600 | 91.100 | 122.000 | 144.000 | 107.000 | 181.000 | 297.000 | 394.000 | 231.000 | 160.000 | 101.000 |
| 15 | 90.900 | 96.500 | 87.500 | 115.000 | 142.000 | 102.000 | 181.000 | 296.000 | 392.000 | 226.000 | 140.000 | 97.300 |
| 16 | 92.200 | 96.400 | 87.300 | 111.000 | 139.000 | 99.100 | 206.000 | 296.000 | 388.000 | 229.000 | 139.000 | 94.200 |
| 17 | 89.400 | 98.700 | 89.500 | 115.000 | 140.000 | 103.000 | 230.000 | 270.000 | 391.000 | 230.000 | 139.000 | 90.900 |
| 18 | 85.200 | 104.000 | 97.600 | 125.000 | 137.000 | 99.800 | 225.000 | 261.000 | 381.000 | 228.000 | 138.000 | 97.900 |
| 19 | 91.700 | 89.300 | 93.300 | 122.000 | 132.000 | 96.700 | 251.000 | 265.000 | 382.000 | 225.000 | 139.000 | 103.000 |
| 20 | 101.000 | 87.200 | 110.000 | 124.000 | 132.000 | 95.900 | 278.000 | 265.000 | 361.000 | 228.000 | 133.000 | 98.900 |
| 21 | 105.000 | 92.100 | 116.000 | 116.000 | 130.000 | 106.000 | 283.000 | 269.000 | 355.000 | 213.000 | 129.000 | 104.000 |
| 22 | 106.000 | 102.000 | 97.900 | 115.000 | 138.000 | 125.000 | 300.000 | 267.000 | 355.000 | 212.000 | 135.000 | 89.300 |
| 23 | 97.400 | 99.300 | 98.200 | 113.000 | 156.000 | 126.000 | 289.000 | 269.000 | 360.000 | 205.000 | 140.000 | 86.700 |
| 24 | 98.300 | 95.500 | 101.000 | 115.000 | 126.000 | 129.000 | 279.000 | 274.000 | 355.000 | 191.000 | 141.000 | 85.300 |
| 25 | 111.000 | 85.500 | 98.400 | 123.000 | 134.000 | 121.000 | 278.000 | 313.000 | 347.000 | 198.000 | 138.000 | 81.100 |
| 26 | 103.000 | 84.200 | 90.000 | 126.000 | 139.000 | 124.000 | 284.000 | 351.000 | 344.000 | 198.000 | 135.000 | 89.400 |
| 27 | 110.000 | 98.000 | 90.900 | 125.000 | 123.000 | 150.000 | 299.000 | 384.000 | 338.000 | 189.000 | 135.000 | 98.600 |
| 28 | 110.000 | 90.500 | 89.800 | 128.000 | 96.800 | 156.000 | 307.000 | 398.000 | 328.000 | 191.000 | 133.000 | 99.500 |
| 29 | 113.000 | 91.700 | 91.600 | 130.000 |  | 165.000 | 298.000 | 414.000 | 314.000 | 187.000 | 134.000 | 96.700 |
| 30 | 105.000 | 91.200 | 86.200 | 132.000 |  | 152.000 | 285.000 | 439.000 | 304.000 | 193.000 | 126.000 | 94.900 |
| 31 | 118.000 |  | 87.700 | 127.000 |  | 138.000 |  | 438.000 |  | 196.000 | 123.000 |  |

Computed as sum of Columbia River near The Dalles, Oregon plus twice the sum of Klickitat River near Pitt, Washington and Hood River and conduit near Hood River, Oregon.

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** OREGON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** COLUMBIA RIVER BELOW YAKIMA RIVER
**STATION LOCATION** COLUMBIA RIVER AT
MCNARY DAM, OREGON

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 13 | 0 | 0 | 2 | 1 | 2 | 1 | 160 | 7 | 76 | 7 | 236 | 10 | | | | | | |
| 10 | 9 | 61 | 10 | 30 | 0 | 1 | 1 | 1 | 1 | 1 | 37 | 5 | 298 | 10 | 335 | 11 | | | | | | |
| 10 | 16 | 61 | 10 | 31 | 0 | 0 | 0 | 1 | 0 | 1 | 147 | 11 | 129 | 12 | 276 | 16 | | | | | | |
| 11 | 6 | 61 | 11 | 28 | 0 | 1 | 1 | 1 | 1 | 1 | 54 | 5 | 157 | 8 | 211 | 9 | | | | | | |
| 11 | 13 | 61 | 11 | 27 | 0 | 0 | 2 | 1 | 2 | 1 | 39 | 5 | 412 | 11 | 451 | 12 | | | | | | |
| 11 | 20 | 61 | 12 | 1 | – | – | – | – | – | – | 41 | 6 | 651 | 13 | 692 | 14 | | | | | | |
| 11 | 27 | 61 | 12 | 6 | 0 | 0 | 1 | 1 | 1 | 1 | 68 | 5 | 538 | 12 | 606 | 13 | | | | | | |
| 12 | 4 | 61 | 12 | 14 | 0 | 0 | 1 | 1 | 1 | 1 | 57 | 5 | 634 | 12 | 691 | 13 | | | | | | |
| 12 | 11 | 61 | 12 | 22 | 0 | 0 | 1 | 1 | 1 | 1 | 37 | 5 | 462 | 11 | 499 | 12 | | | | | | |
| 12 | 18 | 61 | 1 | 2 | 0 | 0 | 1 | 1 | 1 | 1 | 85 | 5 | 442 | 11 | 527 | 12 | | | | | | |
| 12 | 25 | 61 | 1 | 5 | 0 | 0 | 1 | 1 | 1 | 1 | 37 | 5 | 363 | 10 | 400 | 11 | | | | | | |
| 1 | 15 | 62 | 1 | 29 | 0 | 1 | 1 | 1 | 1 | 1 | 45 | 5 | 262 | 9 | 307 | 10 | | | | | | |
| 1 | 22 | 62 | 2 | 6 | 0 | 1 | 1 | 1 | 1 | 1 | 42 | 5 | 338 | 9 | 380 | 10 | | | | | | |
| 1 | 29 | 62 | 2 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | 36 | 4 | 270 | 9 | 306 | 10 | | | | | | |
| 2 | 5 | 62 | 2 | 15 | 0 | 0 | 1 | 1 | 1 | 1 | 46 | 5 | 419 | 11 | 465 | 12 | | | | | | |
| 2 | 12 | 62 | 2 | 23 | 0 | 0 | 1 | 1 | 1 | 1 | 97 | 6 | 367 | 10 | 464 | 12 | | | | | | |
| 2 | 19 | 62 | 3 | 2 | 0 | 0 | 1 | 1 | 1 | 1 | 36 | 9 | 266 | 9 | 302 | 13 | | | | | | |
| 2 | 26 | 62 | 3 | 12 | 0 | 1 | 1 | 1 | 1 | 1 | 136 | 6 | 351 | 10 | 487 | 12 | | | | | | |
| 3 | 5 | 62 | 3 | 19 | 0 | 1 | 0 | 1 | 0 | 1 | 50 | 5 | 266 | 9 | 316 | 10 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | 0 | 1 | 1 | 1 | 1 | 1 | 67 | 5 | 426 | 11 | 493 | 12 | | | | | | |
| 3 | 19 | 62 | 4 | 4 | 0 | 1 | 1 | 1 | 1 | 1 | 107 | 6 | 325 | 10 | 432 | 12 | | | | | | |
| 3 | 26 | 62 | 4 | 10 | 0 | 1 | 0 | 1 | 0 | 1 | 35 | 6 | 387 | 11 | 422 | 13 | | | | | | |
| 4 | 2 | 62 | 4 | 19 | 0 | 1 | 1 | 1 | 1 | 1 | 61 | 5 | 251 | 9 | 312 | 10 | | | | | | |
| 4 | 9 | 62 | 4 | 26 | – | – | – | – | – | – | 159 | 6 | 67 | 8 | 226 | 10 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | – | – | – | – | – | – | 40 | 6 | 168 | 8 | 208 | 10 | | | | | | |
| 4 | 23 | 62 | 5 | 25 | – | – | – | – | – | – | 58 | 7 | 89 | 8 | 147 | 11 | | | | | | |
| 5 | 7 | 62 | 6 | 13 | 0 | 0 | 1 | 1 | 1 | 1 | 9 | 5 | 68 | 7 | 77 | 9 | | | | | | |
| 5 | 21 | 62 | 6 | 27 | – | – | – | – | – | – | 13 | 5 | 70 | 7 | 83 | 9 | | | | | | |
| 5 | 28 | 62 | 6 | 29 | – | – | – | – | – | – | 16 | 3 | 50 | 4 | 66 | 5 | | | | | | |
| 6 | 4 | 62 | 7 | 3 | 0 | 0 | 1 | 1 | 1 | 1 | 21 | 5 | 61 | 6 | 82 | 7 | | | | | | |
| 6 | 11 | 62 | 7 | 10 | – | – | – | – | – | – | 20 | 5 | 50 | 7 | 70 | 9 | | | | | | |
| 6 | 18 | 62 | 7 | 17 | – | – | – | – | – | – | 30 | 5 | 119 | 8 | 149 | 9 | | | | | | |
| 6 | 25 | 62 | 7 | 25 | – | – | – | – | – | – | 13 | 7 | 131 | 8 | 144 | 11 | | | | | | |
| 7 | 2 | 62 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 6 | 70 | 7 | 85 | 9 | | | | | | |
| 7 | 9 | 62 | 8 | 10 | – | – | – | – | – | – | 13 | 3 | 109 | 4 | 122 | 5 | | | | | | |
| 7 | 16 | 62 | 8 | 14 | – | – | – | – | – | – | 16 | 5 | 103 | 8 | 119 | 9 | | | | | | |
| 7 | 24 | 62 | 8 | 15 | – | – | – | – | – | – | 5 | 5 | 87 | 7 | 92 | 8 | | | | | | |
| 7 | 30 | 62 | 8 | 22 | – | – | – | – | – | – | 18 | 6 | 198 | 9 | 216 | 11 | | | | | | |
| 8 | 6 | 62 | 8 | 23 | 0 | 1 | 0 | 1 | 0 | 1 | 16 | 5 | 213 | 10 | 229 | 11 | | | | | | |
| 8 | 13 | 62 | 8 | 27 | – | – | – | – | – | – | 22 | 3 | 227 | 5 | 249 | 6 | | | | | | |

**STATION LOCATION** COLUMBIA RIVER AT

MCNARY DAM, OREGON 81

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| O. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 8 | 20 | 62 | 9 | 7 | - | - | - | - | - | - | 33 | 5 | 132 | 7 | 165 | 8 | | | | | | |
| 8 | 27 | 62 | 9 | 18 | - | - | - | - | - | - | 38 | 7 | 101 | 9 | 139 | 11 | | | | | | |
| 9 | 3 | 62 | 9 | 24 | 0 | 0 | 0 | 1 | 0 | 1 | 23 | 6 | 151 | 9 | 174 | 11 | | | | | | |
| 9 | 10 | 62 | 10 | 8 | - | - | - | - | - | - | 24 | 5 | 201 | 9 | 225 | 10 | | | | | | |
| 9 | 17 | 62 | 10 | 16 | - | - | - | - | - | - | 20 | 5 | 266 | 11 | 286 | 12 | | | | | | |
| 9 | 24 | 62 | 10 | 18 | - | - | - | - | - | - | 19 | 7 | 333 | 11 | 352 | 13 | | | | | | |

| DATE OF SAMPLE | | | TOTAL | ALGAE *(Number per milliliter)* | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLUE - GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 300 | 0 | 0 | 20 | 0 | 20 | 0 | 100 | 100 | 20 | 40 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 300 | 0 | 0 | 40 | 0 | 0 | 0 | 200 | 20 | 130 | 70 | | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 500 | 0 | 0 | 0 | 0 | 20 | 20 | 170 | 350 | 80 | 210 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 600 | 0 | 0 | 20 | 0 | 20 | 20 | 310 | 180 | 110 | 360 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 150 | 20 | 100 | 100 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 230 | 50 | 0 | 50 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 1 | 62 | 100 | 0 | 0 | 20 | 0 | 0 | 0 | 50 | 20 | 20 | 50 | | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 900 | 0 | 0 | 20 | 0 | 0 | 0 | 90 | 810 | 20 | 410 | 88 | 1 | 87 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 1100 | 140 | 0 | 20 | 0 | 20 | 0 | 270 | 610 | 110 | 140 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 1000 | 0 | 0 | 20 | 0 | 90 | 70 | 340 | 500 | 110 | 140 | 92 | 1 | 77 | 1 | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 1400 | 20 | 0 | 0 | 0 | 0 | 50 | 780 | 580 | 180 | 340 | 77 | 2 | 71 | 1 | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 1500 | 0 | 0 | 50 | 0 | 20 | 20 | 290 | 1110 | 200 | 270 | 77 | 3 | 71 | 1 | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 1100 | 60 | 0 | 40 | 0 | 20 | 20 | 230 | 700 | 40 | 100 | 77 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 3100 | 550 | 0 | 40 | 0 | 330 | 20 | 910 | 1240 | 480 | 440 | 71 | 3 | 77 | 3 | 4 | 2 | 51 | 1 | 5 | 1 | | | | | | | | | | |
| 5 | 7 | 62 | 3800 | 40 | 0 | 20 | 0 | 170 | 20 | 1100 | 2420 | 270 | 170 | 77 | 3 | 71 | 3 | 92 | 2 | 88 | 1 | 69 | 1 | 51 | 1 | | | | | | | | |
| 5 | 21 | 62 | 3700 | 0 | 0 | 0 | 0 | 250 | 0 | 1770 | 1650 | 340 | 1160 | 69 | 3 | 92 | 3 | 71 | 3 | 57 | 1 | 82 | 1 | | | | | | | | | | |
| 6 | 4 | 62 | 4800 | 0 | 0 | 60 | 0 | 250 | 0 | 1940 | 2550 | 630 | 2870 | 71 | 3 | 77 | 3 | 69 | 3 | 92 | 3 | 57 | 1 | 93 | 1 | 82 | 1 | | | | | | |
| 6 | 18 | 62 | 3800 | 0 | 0 | 60 | 0 | 40 | 20 | 1060 | 2630 | 170 | 350 | 92 | 3 | 71 | 2 | 77 | 2 | 69 | 2 | 93 | 1 | 84 | 1 | | | | | | | | |
| 7 | 2 | 62 | 300 | 0 | 0 | 40 | 0 | 0 | 0 | 130 | 130 | 0 | 250 | | | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 2800 | 20 | 0 | 0 | 0 | 0 | 0 | 450 | 2320 | 450 | 1440 | 77 | 3 | 92 | 2 | 69 | 2 | 93 | 2 | | | | | | | | | | | | |
| 8 | 6 | 62 | 3000 | 40 | 120 | 20 | 0 | 0 | 0 | 930 | 1860 | 210 | 790 | 77 | 3 | 68 | 2 | 69 | 1 | 92 | 1 | | | | | | | | | | | | |
| 8 | 20 | 62 | 2400 | 0 | 40 | 360 | 0 | 0 | 0 | 1270 | 720 | 1690 | 760 | 68 | 3 | 92 | 2 | 25 | 1 | 69 | 1 | 84 | 1 | | | | | | | | | | |
| 9 | 3 | 62 | 7700 | 0 | 250 | 910 | 0 | 300 | 40 | 4900 | 1310 | 2490 | 840 | 25 | 2 | 26 | 1 | 51 | 1 | 16 | 1 | 69 | 1 | | | | | | | | | | |
| 9 | 17 | 62 | 500 | 30 | 0 | 90 | 90 | 80 | 90 | 40 | 70 | 130 | 260 | | | | | | | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

| | |
|---|---|
| **STATE** | OREGON |
| **MAJOR BASIN** | PACIFIC NORTHWEST |
| **MINOR BASIN** | COLUMBIA RIVER BELOW YAKIMA RIVER |
| **STATION LOCATION** | COLUMBIA RIVER AT<br>MCNARY DAM, OREGON 081 |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA *(Identifiable) Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 92 | 41 | 82 | 16 | 47 | 12 | 58 | 10 | 21 | 0 | 0 | 39 | 17 | 2 | 21 | 2 | 11 | 1 | | | | | 2 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 58 | 39 | 92 | 26 | 47 | 9 | 82 | 9 | 17 | 0 | 0 | 13 | 21 | 1 | | | | | | | | | 11 | 51 | 2 | | | | | 0 | 0 |
| 11 | 6 | 61 | 92 | 29 | 58 | 18 | 36 | 11 | 47 | 10 | 32 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 92 | 13 | 36 | 11 | 47 | 9 | 82 | 8 | 59 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 2 | 11 | 47 | 9 | 71 | 7 | 82 | 6 | 67 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 92 | 18 | 80 | 15 | 71 | 7 | 56 | 6 | 54 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 1 | 62 | 92 | 21 | 80 | 12 | 36 | 8 | 95 | 8 | 51 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 92 | 13 | 71 | 11 | 65 | 8 | 80 | 5 | 63 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 92 | 17 | 62 | 8 | 2 | 6 | 47 | 6 | 63 | 0 | 0 | 4 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 92 | 10 | 36 | 8 | 9 | 7 | 95 | 7 | 68 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 9 | 33 | 82 | 15 | 95 | 5 | 62 | 4 | 43 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 9 | 36 | 95 | 11 | 82 | 6 | 92 | 6 | 41 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 47 | 18 | 9 | 10 | 80 | 9 | 92 | 9 | 54 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 9 | 25 | 82 | 24 | 80 | 7 | 65 | 7 | 37 | 0 | 0 | 28 | 11 | 3 | | | | | | | | | 0 | | | | | | | 0 | 2 |
| 5 | 7 | 62 | 80 | 24 | 9 | 20 | 61 | 15 | 82 | 8 | 33 | 20 | 0 | 3 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 80 | 27 | 61 | 16 | 92 | 13 | 47 | 10 | 34 | 20 | 0 | 6 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 80 | 29 | 92 | 17 | 62 | 13 | 61 | 10 | 31 | 0 | 0 | 6 | 11 | 1 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 95 | 36 | 9 | 29 | 61 | 22 | 80 | 5 | 8 | 0 | 0 | 9 | 11 | 1 | | | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 7 | 2 | 62 | 61 | 35 | 9 | 13 | 47 | 13 | 95 | 12 | 27 | 0 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 5 |
| 7 | 16 | 62 | 9 | 43 | 47 | 12 | 95 | 12 | 61 | 11 | 22 | 0 | 0 | 23 | 17 | 2 | 11 | 1 | | | | | | | 4 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 47 | 28 | 58 | 18 | 95 | 18 | 56 | 6 | 30 | 0 | 0 | 17 | 11 | 2 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 27 | 37 | 47 | 35 | 92 | 11 | 58 | 9 | 8 | 0 | 0 | 97 | 11 | 4 | 16 | 2 | 17 | 2 | 21 | 1 | | | 15 | 51 | 3 | 76 | 1 | | | 0 | 0 |
| 9 | 3 | 62 | 82 | 61 | 58 | 12 | 47 | 8 | 92 | 7 | 12 | 0 | 0 | 312 | 17 | 5 | 11 | 5 | 21 | 4 | 16 | 3 | 22 | 2 | 27 | 50 | 3 | 76 | 2 | 53 | 1 | 0 | 0 |
| 9 | 17 | 62 | 82 | 38 | 47 | 12 | 26 | 6 | 62 | 5 | 39 | 0 | 0 | 178 | 17 | 4 | 11 | 4 | 22 | 3 | 21 | 2 | 16 | 1 | 55 | 51 | 4 | 50 | 4 | 76 | 2 | 0 | 0 |

687-228 O-63—14

## NATIONAL WATER QUALITY NETWORK

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** OREGON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** COLUMBIA RIVER BELOW YAKIMA RIVER
**STATION LOCATION** COLUMBIA RIVER AT
MCNARY DAM, OREGON

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 2 | 61 | 10 | 16 | 5000 | 194 | 44 | 150 | 0 | 9 | 16 | 2 | 1 | 12 | 1 | 7 | 3 | 1 | 8 |
| 11 | 6 | 61 | 11 | 19 | 5000 | 76 | 19 | 57 | 1 | 5 | 7 | 1 | 1 | 4 | 1 | 2 | 1 | 1 | 2 |
| 12 | 4 | 61 | 12 | 18 | 4979 | 91 | 22 | 69 | 1 | 5 | 7 | 1 | 1 | 5 | 0 | 2 | 1 | 0 | 6 |
| 1 | 1 | 62 | 1 | 15 | 4973 | 90 | 20 | 70 | 0 | 4 | 8 | 1 | 1 | 6 | 0 | 2 | 1 | 0 | 5 |
| 2 | 5 | 62 | 2 | 19 | 4836 | 92 | 23 | 69 | 1 | 6 | 8 | 1 | 1 | 6 | 0 | 2 | 1 | 1 | 4 |
| 3 | 5 | 62 | 3 | 19 | 5000 | 83 | 24 | 59 | 1 | 6 | 8 | 1 | 1 | 6 | 0 | 2 | 1 | 1 | 5 |
| 4 | 2 | 62 | 4 | 16 | 4800 | 122 | 37 | 85 | 1 | 10 | 10 | 1 | 0 | 9 | 0 | 5 | 3 | 1 | 7 |
| 5 | 7 | 62 | 5 | 21 | 5000 | 106 | 48 | 58 | 3 | 12 | 11 | 1 | 1 | 8 | 1 | 5 | 5 | 1 | 11 |
| 6 | 4 | 62 | 6 | 18 | 5000 | 103 | 49 | 54 | 2 | 14 | 11 | 1 | 1 | 9 | 0 | 5 | 4 | 0 | 13 |
| 7 | 2 | 62 | 7 | 15 | 4595 | 75 | 25 | 50 | 0 | 7 | 9 | 1 | 1 | 7 | 0 | 3 | 1 | 0 | 5 |
| 8 | 6 | 62 | 8 | 20 | 4845 | 89 | 27 | 62 | 1 | 8 | 10 | 1 | 1 | 8 | -0 | 2 | 1 | 1 | 4 |
| 9 | 3 | 62 | 9 | 17 | 4950 | 92 | 33 | 59 | 1 | 9 | 11 | 1 | 1 | 9 | 0 | 4 | 2 | 1 | 5 |

**MINOR BASIN** COLUMBIA RIVER BELOW YAKIMA RIVER

**STATION LOCATION** COLUMBIA RIVER AT
MCNARY DAM, OREGON 81

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 19 | 61 | - | - | - | - | 7 | - | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 13 | 61 | - | - | - | - | 4 | - | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 15 | 61 | - | - | - | - | 16 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 8 | 62 | - | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 12 | 62 | - | - | - | - | 4 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 12 | 62 | - | - | 7.6 | - | 5 | - | - | - | 9 | 88 | 108 | 5 | - | 29 | - | - | - |
| 3 | 19 | 62 | - | - | - | - | - | - | - | - | 8 | - | - | - | - | 33 | - | - | - |
| 4 | 9 | 62 | - | - | - | - | 13 | - | - | - | - | - | - | - | - | 25 | - | - | - |
| 4 | 16 | 62 | - | - | - | - | - | - | - | - | 16 | 64 | 80 | 10 | - | 26 | .0 | - | - |
| 4 | 23 | 62 | - | - | - | - | - | - | - | - | 6 | - | - | - | - | - | - | - | - |
| 5 | 21 | 62 | - | - | - | - | - | - | - | - | 5 | - | - | - | - | 22 | - | - | - |
| 6 | 18 | 62 | - | - | 7.9 | - | - | - | - | - | 7 | 52 | 76 | 5 | *25 | 13 | .0 | - | - |
| 7 | 9 | 62 | - | - | - | - | - | - | - | - | 4 | 56 | 64 | 5 | 25 | 14 | - | - | - |
| 7 | 16 | 62 | - | - | - | - | 11 | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 24 | 62 | - | - | - | - | - | - | - | - | 3 | 60 | 64 | 5 | 25 | 13 | .0 | - | - |
| 7 | 30 | 62 | - | - | - | - | - | - | - | - | 4 | 56 | 68 | 10 | 25 | 16 | .0 | - | - |
| 8 | 6 | 62 | - | - | 7.8 | - | - | - | - | - | 9 | 56 | 76 | 5 | *25 | 21 | - | - | - |
| 8 | 13 | 62 | - | - | - | - | 7 | - | - | - | 5 | 64 | 76 | 5 | - | 17 | - | 85 | - |
| 8 | 20 | 62 | - | - | 79. | - | - | - | - | - | 2 | 64 | 68 | 5 | *25 | 13 | .0 | 70 | - |
| 8 | 27 | 62 | - | - | 7.8 | - | - | - | - | - | 3 | 68 | 76 | 5 | *25 | 15 | .1 | 102 | - |
| 9 | 3 | 62 | - | - | - | - | - | - | - | - | 5 | 68 | 72 | 5 | 25 | 18 | .0 | 100 | - |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | 5 | 68 | 82 | 0 | 25 | 19 | .0 | 110 | - |
| 9 | 10 | 62 | - | - | - | - | 5 | - | - | - | 4 | - | 80 | 5 | 25 | 20 | .0 | - | - |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | 7 | 72 | 80 | 10 | *25 | 21 | .0 | 118 | - |
| 9 | 24 | 62 | - | - | 7.8 | - | - | - | - | - | 4 | 68 | 84 | 5 | 0 | 20 | .0 | 106 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station below McNary Dam, Oregon
Operated by U.S. Geological Survey

| | |
|---|---|
| STATE | Oregon |
| MAJOR BASIN | Pacific Northwest |
| MINOR BASIN | Columbia River below Yakima River |
| STATION LOCATION | Columbia River at<br>McNary Dam, Oregon |

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 78.700 | 94.800 | 85.400 | 71.700 | 113.000 | 101.000 | 113.000 | 253.000 | 419.000 | 286.000 | 199.000 | 109.000 |
| 2 | 74.900 | 87.500 | 85.700 | 76.400 | 115.000 | 115.000 | 106.000 | 244.000 | 431.000 | 287.000 | 202.000 | 109.000 |
| 3 | 82.900 | 93.400 | 85.700 | 76.800 | 116.000 | 120.000 | 119.000 | 235.000 | 430.000 | 279.000 | 205.000 | 108.000 |
| 4 | 85.400 | 95.900 | 86.900 | 75.700 | 125.000 | 104.000 | 121.000 | 242.000 | 437.000 | 271.000 | 198.000 | 104.000 |
| 5 | 76.300 | 90.000 | 93.800 | 75.600 | 118.000 | 101.000 | 135.000 | 249.000 | 434.000 | 276.000 | 200.000 | 98.300 |
| 6 | 76.100 | 82.600 | 95.800 | 80.400 | 121.000 | 85.700 | 149.000 | 244.000 | 420.000 | 274.000 | 189.000 | 104.000 |
| 7 | 75.700 | 92.200 | 88.600 | 75.900 | 124.000 | 85.500 | 186.000 | 242.000 | 395.000 | 274.000 | 180.000 | 104.000 |
| 8 | 75.600 | 89.700 | 88.200 | 80.200 | 122.000 | 87.600 | 209.000 | 244.000 | 386.000 | 269.000 | 177.000 | 90.000 |
| 9 | 75.700 | 85.400 | 86.400 | 113.000 | 124.000 | 87.600 | 208.000 | 250.000 | 370.000 | 265.000 | 179.000 | 85.700 |
| 10 | 75.600 | 85.500 | 82.900 | 130.000 | 124.000 | 94.600 | 195.000 | 278.000 | 377.000 | 257.000 | 164.000 | 96.600 |
| 11 | 84.000 | 85.000 | 82.700 | 113.000 | 124.000 | 103.000 | 168.000 | 288.000 | 389.000 | 241.000 | 159.000 | 96.400 |
| 12 | 91.000 | 83.800 | 87.400 | 113.000 | 122.000 | 92.000 | 170.000 | 304.000 | 402.000 | 237.000 | 145.000 | 90.400 |
| 13 | 90.800 | 80.700 | 85.900 | 112.000 | 127.000 | 99.400 | 159.000 | 265.000 | 390.000 | 230.000 | 148.000 | 92.200 |
| 14 | 90.800 | 85.400 | 85.700 | 107.000 | 126.000 | 92.100 | 155.000 | 280.000 | 379.000 | 217.000 | 142.000 | 89.200 |
| 15 | 90.400 | 86.500 | 84.700 | 100.000 | 127.000 | 87.200 | 170.000 | 288.000 | 380.000 | 222.000 | 133.000 | 92.400 |
| 16 | 80.300 | 88.700 | 80.100 | 96.500 | 125.000 | 87.600 | 189.000 | 260.000 | 376.000 | 223.000 | 130.000 | 83.600 |
| 17 | 79.400 | 101.000 | 83.400 | 111.000 | 126.000 | 89.200 | 194.000 | 255.000 | 370.000 | 221.000 | 131.000 | 85.900 |
| 18 | 80.900 | 85.800 | 81.500 | 112.000 | 113.000 | 85.700 | 217.000 | 247.000 | 374.000 | 218.000 | 134.000 | 98.800 |
| 19 | 89.300 | 74.900 | 85.900 | 115.000 | 115.000 | 84.000 | 239.000 | 250.000 | 356.000 | 217.000 | 131.000 | 86.900 |
| 20 | 96.700 | 74.700 | 89.200 | 110.000 | 115.000 | 86.000 | 251.000 | 254.000 | 346.000 | 212.000 | 121.000 | 98.500 |
| 21 | 99.200 | 89.700 | 89.600 | 105.000 | 123.000 | 107.000 | 268.000 | 254.000 | 345.000 | 207.000 | 127.000 | 88.600 |
| 22 | 91.100 | 93.400 | 85.400 | 103.000 | 133.000 | 111.000 | 264.000 | 250.000 | 342.000 | 198.000 | 126.000 | 84.800 |
| 23 | 89.700 | 88.000 | 81.600 | 107.000 | 125.000 | 114.000 | 257.000 | 258.000 | 346.000 | 186.000 | 138.000 | 75.300 |
| 24 | 93.800 | 76.200 | 81.500 | 108.000 | 122.000 | 113.000 | 251.000 | 274.000 | 340.000 | 190.000 | 134.000 | 75.900 |
| 25 | 95.900 | 75.700 | 71.900 | 113.000 | 120.000 | 97.700 | 252.000 | 307.000 | 333.000 | 188.000 | 130.000 | 78.800 |
| 26 | 104.000 | 83.000 | 76.300 | 112.000 | 117.000 | 113.000 | 276.000 | 350.000 | 330.000 | 183.000 | 128.000 | 82.000 |
| 27 | 101.000 | 82.300 | 75.600 | 115.000 | 97.300 | 127.000 | 281.000 | 373.000 | 319.000 | 184.000 | 127.000 | 93.200 |
| 28 | 104.000 | 82.600 | 75.700 | 117.000 | 112.000 | 139.000 | 276.000 | 386.000 | 308.000 | 180.000 | 127.000 | 90.100 |
| 29 | 101.000 | 75.700 | 75.600 | 121.000 | | 147.000 | 273.000 | 406.000 | 302.000 | 181.000 | 122.000 | 89.300 |
| 30 | 95.600 | 83.800 | 71.700 | 121.000 | | 124.000 | 262.000 | 417.000 | 286.000 | 185.000 | 119.000 | 85.800 |
| 31 | 107.000 | | 70.300 | 115.000 | | 112.000 | | 420.000 | | 192.000 | 114.000 | |

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

MIDDLE AND LOWER SNAKE RIVER

**STATION LOCATION** COLUMBIA RIVER AT

PASCO, WASHINGTON 9

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 17 | 61 | 10 | 27 | 5830 | 77 | 18 | 59 | 1 | 4 | 6 | 1 | 0 | 4 | 1 | 2 | 1 | 1 | 3 |
| 11 | 14 | 61 | 11 | 21 | 4750 | 56 | 23 | 33 | 1 | 7 | 6 | 1 | 1 | 3 | 1 | 2 | 1 | 1 | 5 |
| 12 | 12 | 61 | 12 | 20 | 5130 | 66 | 12 | 54 | 0 | 4 | 4 | 1 | 0 | 3 | 0 | 1 | 1 | 0 | 2 |
| 1 | 17 | 62 | 1 | 24 | 5190 | 63 | 12 | 51 | 0 | 4 | 3 | 0 | 0 | 3 | 0 | 1 | 1 | 0 | 3 |
| 2 | 7 | 62 | 2 | 21 | 5320 | 90 | 26 | 64 | 2 | 8 | 5 | 0 | 0 | 4 | 1 | 2 | 2 | 0 | 7 |
| 3 | 13 | 62 | 3 | 24 | 6380 | 68 | 20 | 48 | 1 | 5 | 7 | 1 | 1 | 5 | 0 | 2 | 1 | 0 | 4 |
| 4 | 9 | 62 | 4 | 16 | 5240 | 78 | 22 | 56 | 1 | 6 | 7 | 1 | 1 | 5 | 0 | 2 | 2 | 0 | 4 |
| 5 | 5 | 62 | 5 | 17 | 3920 | 104 | 35 | 69 | 1 | 10 | 9 | 1 | 1 | 7 | 0 | 5 | 3 | 1 | 6 |
| 6 | 8 | 62 | 6 | 24 | 3720 | 112 | 50 | 62 | 4 | 14 | 10 | 1 | 1 | 8 | 0 | 6 | 4 | 1 | 11 |
| 7 | 18 | 62 | 7 | 27 | 4640 | 64 | 29 | 35 | 0 | 8 | 9 | 2 | 1 | 6 | 0 | 4 | 2 | 1 | 5 |
| 8 | 14 | 62 | 8 | 22 | 4440 | 84 | 29 | 55 | 1 | 9 | 7 | 1 | 1 | 5 | 0 | 5 | 1 | 1 | 5 |
| 9 | 5 | 62 | 9 | 15 | 4000 | 115 | 29 | 86 | 1 | 9 | 8 | 1 | 1 | 6 | 0 | 4 | 2 | 0 | 5 |

**STATION LOCATION** COLUMBIA RIVER AT
PASCO, WASHINGTON

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 27 | – | – | – | – | – | – | 43 | 5 | 604 | 12 | 647 | 13 | | | | | | |
| 10 | 9 | 61 | 10 | 25 | – | – | – | – | – | – | 64 | 7 | 1065 | 28 | 1129 | 29 | | | | | | |
| 10 | 16 | 61 | 10 | 31 | – | – | – | – | – | – | 85 | 7 | 641 | 14 | 726 | 16 | | | | | | |
| 10 | 23 | 61 | 11 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 122 | 7 | 672 | 13 | 794 | 15 | | | | | | |
| 10 | 30 | 61 | 11 | 14 | – | – | – | – | – | – | 65 | 6 | 575 | 13 | 640 | 14 | | | | | | |
| 11 | 6 | 61 | 11 | 21 | – | – | – | – | – | – | 70 | 6 | 383 | 11 | 453 | 13 | | | | | | |
| 11 | 13 | 61 | 11 | 30 | – | – | – | – | – | – | 58 | 6 | 717 | 13 | 775 | 14 | | | | | | |
| 11 | 20 | 61 | 12 | 4 | – | – | – | – | – | – | 78 | 6 | 724 | 14 | 802 | 15 | | | | | | |
| 11 | 27 | 61 | 12 | 8 | 0 | 1 | 0 | 1 | 0 | 1 | 37 | 4 | 925 | 14 | 962 | 15 | | | | | | |
| 12 | 4 | 61 | 12 | 18 | – | – | – | – | – | – | 122 | 7 | 719 | 13 | 841 | 15 | | | | | | |
| 12 | 11 | 61 | 12 | 26 | – | – | – | – | – | – | 86 | 7 | 638 | 12 | 724 | 14 | | | | | | |
| 12 | 18 | 61 | 1 | 9 | – | – | – | – | – | – | 44 | 6 | 356 | 10 | 400 | 12 | | | | | | |
| 12 | 27 | 61 | 1 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | 178 | 7 | 1551 | 18 | 1729 | 19 | | | | | | |
| 1 | 2 | 62 | 1 | 18 | – | – | – | – | – | – | 132 | 7 | 986 | 16 | 1118 | 17 | | | | | | |
| 1 | 15 | 62 | 1 | 29 | – | – | – | – | – | – | 51 | 6 | 602 | 14 | 653 | 15 | | | | | | |
| 1 | 22 | 62 | 2 | 7 | 0 | 1 | 1 | 1 | 1 | 1 | 50 | 5 | 634 | 12 | 684 | 14 | | | | | | |
| 1 | 30 | 62 | 2 | 13 | – | – | – | – | – | – | 48 | 5 | 429 | 11 | 477 | 12 | | | | | | |
| 2 | 5 | 62 | 2 | 20 | – | – | – | – | – | – | 54 | 5 | 676 | 13 | 730 | 14 | | | | | | |
| 2 | 13 | 62 | 2 | 28 | – | – | – | – | – | – | 66 | 6 | 459 | 11 | 525 | 13 | | | | | | |
| 2 | 19 | 62 | 3 | 6 | – | – | – | – | – | – | 62 | 6 | 315 | 10 | 377 | 12 | | | | | | |
| 2 | 26 | 62 | 3 | 13 | 0 | 1 | 1 | 1 | 1 | 1 | 90 | 6 | 344 | 10 | 434 | 12 | | | | | | |
| 3 | 5 | 62 | 3 | 20 | – | – | – | – | – | – | 65 | 6 | 509 | 12 | 574 | 13 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | – | – | – | – | – | – | 54 | 6 | 744 | 14 | 798 | 15 | | | | | | |
| 3 | 19 | 62 | 4 | 4 | – | – | – | – | – | – | 55 | 12 | 543 | 11 | 598 | 16 | | | | | | |
| 3 | 26 | 62 | 4 | 12 | 0 | 0 | 1 | 1 | 1 | 1 | 51 | 5 | 574 | 12 | 625 | 13 | | | | | | |
| 4 | 2 | 62 | 4 | 19 | – | – | – | – | – | – | 163 | 8 | 488 | 12 | 651 | 14 | | | | | | |
| 4 | 9 | 62 | 4 | 27 | – | – | – | – | – | – | 72 | 6 | 237 | 9 | 309 | 11 | | | | | | |
| 4 | 16 | 62 | 6 | 18 | – | – | – | – | – | – | 30 | 6 | 149 | 11 | 179 | 13 | | | | | | |
| 4 | 23 | 62 | 5 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 194 | 8 | 133 | 8 | 327 | 11 | | | | | | |
| 5 | 7 | 62 | 6 | 19 | – | – | – | – | – | – | 39 | 6 | 124 | 9 | 163 | 11 | | | | | | |
| 5 | 15 | 62 | 6 | 22 | – | – | – | – | – | – | 18 | 3 | 147 | 5 | 165 | 6 | | | | | | |
| 5 | 21 | 62 | 6 | 27 | – | – | – | – | – | – | 41 | 6 | 94 | 8 | 135 | 10 | | | | | | |
| 5 | 28 | 62 | 7 | 3 | – | – | – | – | – | – | 7168 | 38 | 138 | 8 | 7306 | 39 | | | | | | |
| 6 | 4 | 62 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 17 | 5 | 93 | 7 | 110 | 9 | | | | | | |
| 6 | 11 | 62 | 7 | 17 | 0 | 0 | 1 | 1 | 1 | 1 | 29 | 5 | 102 | 8 | 131 | 9 | | | | | | |
| 6 | 18 | 62 | 7 | 18 | – | – | – | – | – | – | 48 | 5 | 12 | 6 | 60 | 7 | | | | | | |
| 7 | 16 | 62 | 8 | 7 | – | – | – | – | – | – | 14 | 6 | 186 | 10 | 200 | 12 | | | | | | |
| 7 | 23 | 62 | 8 | 21 | 0 | 1 | 0 | 1 | 0 | 1 | 9 | 6 | 116 | 8 | 125 | 10 | | | | | | |
| 7 | 30 | 62 | 8 | 21 | – | – | – | – | – | – | 23 | 5 | 194 | 9 | 217 | 10 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** WASHINGTON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** MIDDLE AND LOWER SNAKE RIVER
**STATION LOCATION** COLUMBIA RIVER AT
PASCO, WASHINGTON 9

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 13 | 62 | 8 | 30 | - | - | - | - | - | - | 45 | 6 | 431 | 13 | 476 | 14 | | | | | | |
| 8 | 20 | 62 | 9 | 7 | - | - | - | - | - | - | 26 | 6 | 299 | 11 | 325 | 13 | | | | | | |
| 8 | 27 | 62 | 9 | 12 | 0 | 0 | 0 | 1 | 0 | 1 | 40 | 5 | 278 | 9 | 318 | 10 | | | | | | |
| 9 | 4 | 62 | 10 | 2 | - | - | - | - | - | - | 49 | 7 | 280 | 10 | 329 | 12 | | | | | | |
| 9 | 17 | 62 | 10 | 15 | - | - | - | - | - | - | 35 | 6 | 57 | 15 | 92 | 16 | | | | | | |
| 9 | 24 | 62 | 10 | 19 | 0 | 1 | 0 | 1 | 0 | 1 | 75 | 5 | 405 | 9 | 480 | 10 | | | | | | |

**STATION LOCATION** COLUMBIA RIVER AT

PASCO, WASHINGTON

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for* | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE - GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9T |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS |
| 10 | 2 | 61 | 1500 | 0 | 20 | 190 | 0 | 100 | 0 | 680 | 540 | 60 | 330 | 69 | 2 | 71 | 1 | | | | | | | | | | | | | |
| 10 | 16 | 61 | 1200 | 0 | 0 | 130 | 0 | 130 | 20 | 500 | 410 | 20 | 480 | 69 | 1 | 71 | 1 | | | | | | | | | | | | | |
| 11 | 6 | 61 | 400 | 0 | 0 | 20 | 0 | 0 | 0 | 230 | 190 | 0 | 310 | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 600 | 0 | 0 | 20 | 0 | 0 | 0 | 190 | 440 | 20 | 230 | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 800 | 0 | 0 | 70 | 0 | 0 | 0 | 290 | 430 | 20 | 200 | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 800 | 0 | 0 | 0 | 0 | 50 | 20 | 70 | 650 | 0 | 90 | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 310 | 290 | 1070 | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 700 | 0 | 0 | 90 | 0 | 0 | 0 | 110 | 540 | 20 | 110 | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 1000 | 50 | 0 | 20 | 0 | 160 | 0 | 230 | 520 | 20 | 160 | 84 | 1 | 92 | 1 | 51 | 1 | | | | | | | | | | | |
| 2 | 19 | 62 | 900 | 0 | 0 | 0 | 0 | 20 | 0 | 220 | 670 | 180 | 760 | 77 | 1 | 84 | 1 | 69 | 1 | | | | | | | | | | | |
| 3 | 5 | 62 | 2000 | 210 | 0 | 20 | 0 | 0 | 0 | 290 | 1490 | 0 | 230 | 77 | 2 | 88 | 1 | 3 | 1 | 93 | 1 | 92 | 1 | | | | | | | |
| 3 | 19 | 62 | 3100 | 0 | 0 | 0 | 0 | 20 | 0 | 750 | 2340 | 20 | 330 | 77 | 3 | 71 | 3 | 92 | 2 | 82 | 1 | 81 | 1 | | | | | | | |
| 4 | 2 | 62 | 4000 | 0 | 0 | 0 | 0 | 60 | 60 | 1040 | 2860 | 150 | 310 | 77 | 4 | 88 | 3 | 68 | 2 | 92 | 2 | 69 | 1 | 85 | 1 | 81 | 1 | | | |
| 4 | 16 | 62 | 2900 | 0 | 0 | 130 | 0 | 40 | 0 | 1140 | 1560 | 170 | 890 | 71 | 3 | 77 | 3 | 92 | 1 | 81 | 1 | | | | | | | | | |
| 5 | 7 | 62 | 3200 | 0 | 0 | 0 | 0 | 20 | 0 | 620 | 2590 | 100 | 210 | 88 | 3 | 73 | 3 | 71 | 2 | 92 | 2 | 81 | 1 | 69 | 1 | | | | | |
| 5 | 21 | 62 | 11100 | 20 | 0 | 40 | 0 | 520 | 0 | 1900 | 8590 | 250 | 730 | 77 | 5 | 92 | 4 | 69 | 4 | 88 | 4 | 57 | 2 | 82 | 2 | 85 | 2 | 84 | 1 | 87 |
| 6 | 4 | 62 | 3700 | 0 | 0 | 0 | 0 | 220 | 0 | 690 | 2820 | 220 | 890 | 77 | 4 | 69 | 3 | 93 | 2 | 92 | 1 | 57 | 1 | | | | | | | |
| 6 | 18 | 62 | 3300 | 0 | 0 | 0 | 40 | 0 | 0 | 760 | 2490 | 300 | 760 | 77 | 4 | 69 | 2 | 92 | 1 | 93 | 1 | | | | | | | | | |
| 7 | 2 | 62 | 2300 | 0 | 0 | 0 | 0 | 0 | 0 | 930 | 1350 | 170 | 970 | 69 | 3 | 92 | 3 | 93 | 2 | 68 | 1 | 84 | 1 | | | | | | | |
| 7 | 16 | 62 | 3200 | 0 | 20 | 120 | 0 | 0 | 0 | 200 | 2860 | 200 | 720 | 77 | 4 | 92 | 2 | 93 | 2 | 84 | 1 | 69 | 1 | | | | | | | |
| 8 | 6 | 62 | 1900 | 0 | 0 | 0 | 60 | 40 | 0 | 460 | 1370 | 0 | 370 | 92 | 3 | 69 | 1 | 77 | 1 | | | | | | | | | | | |
| 8 | 20 | 62 | 4100 | 0 | 0 | 0 | 40 | 0 | 0 | 1120 | 2900 | 120 | 620 | 92 | 4 | 68 | 3 | 88 | 2 | 69 | 1 | 84 | 1 | | | | | | | |
| 9 | 4 | 62 | 200 | 0 | 0 | 110 | 0 | 20 | 0 | 30 | 80 | 80 | 510 | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 400 | 0 | 30 | 190 | 0 | 30 | 0 | 70 | 110 | 180 | 390 | | | | | | | | | | | | | | | | | |

**STATION LOCATION** COLUMBIA RIVER AT
PASCO, WASHINGTON 009

| DATE OF SAMPLE: MONTH | DATE OF SAMPLE: DAY | DATE OF SAMPLE: YEAR | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes): 1ST SPECIES | 1ST PERCENT | 2ND SPECIES | 2ND PERCENT | 3RD SPECIES | 3RD PERCENT | 4TH SPECIES | 4TH PERCENT | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA Number per ml. | PROTOZOA (Identifiable) Number per ml. | MICROINVERTEBRATES: ROTIFERS: NUMBER PER LITER | ROTIFERS GENERA AND COUNT LEVEL (See text for Codes): 1ST GENUS | 1ST COUNT LEVEL | 2ND GENUS | 2ND COUNT LEVEL | 3RD GENUS | 3RD COUNT LEVEL | 4TH GENUS | 4TH COUNT LEVEL | 5TH GENUS | 5TH COUNT LEVEL | CRUSTACEA: NUMBER PER LITER | CRUSTACEA GENERA AND COUNT LEVEL (See text for Codes): 1ST GENUS | 1ST COUNT LEVEL | 2ND GENUS | 2ND COUNT LEVEL | 3RD GENUS | 3RD COUNT LEVEL | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 2 | 61 | 47 | 21 | 92 | 15 | 58 | 11 | 62 | 10 | 43 | 20 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 58 | 22 | 2 | 19 | 62 | 13 | 92 | 10 | 36 | 0 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 47 | 12 | 2 | 10 | 62 | 10 | 58 | 9 | 59 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 62 | 19 | 2 | 11 | 71 | 8 | 92 | 7 | 55 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 62 | 16 | 92 | 9 | 71 | 8 | 2 | 6 | 61 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 12 | 18 | 61 | 62 | 20 | 92 | 12 | 2 | 12 | 71 | 6 | 50 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 62 | 17 | 2 | 11 | 92 | 10 | 47 | 5 | 57 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 62 | 20 | 71 | 12 | 2 | 10 | 92 | 8 | 50 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 2 | 5 | 62 | 47 | 19 | 92 | 16 | 62 | 9 | 49 | 8 | 48 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 65 | 13 | 71 | 9 | 9 | 7 | 92 | 6 | 65 | 0 | 0 | 0 | | | | | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 3 | 5 | 62 | 9 | 20 | 95 | 16 | 62 | 14 | 70 | 7 | 43 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 62 | 19 | 45 | 13 | 95 | 9 | 92 | 9 | 50 | 0 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 62 | 20 | 92 | 11 | 9 | 10 | 45 | 5 | 54 | 0 | 0 | 4 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 92 | 15 | 62 | 9 | 47 | 8 | 31 | 7 | 61 | 40 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 9 | 25 | 61 | 15 | 2 | 10 | 82 | 9 | 41 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 5 | 21 | 62 | 61 | 25 | 9 | 22 | 47 | 27 | 95 | 12 | 14 | 290 | 0 | 5 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 61 | 42 | 47 | 14 | 9 | 12 | 95 | 11 | 21 | 0 | 0 | 8 | | | | | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 6 | 18 | 62 | 95 | 22 | 9 | 20 | 47 | 17 | 61 | 10 | 31 | 0 | 0 | 12 | 11 | 1 | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 47 | 28 | 61 | 20 | 95 | 18 | 62 | 9 | 25 | 0 | 0 | 3 | | | | | | | | | | | 2 | | | | | | | 1 | 0 |
| 7 | 16 | 62 | 27 | 18 | 9 | 18 | 95 | 14 | 47 | 11 | 39 | 0 | 0 | 18 | 11 | 1 | 17 | 1 | | | | | | | 2 | | | | | | | 0 | 1 |
| 8 | 6 | 62 | 47 | 26 | 58 | 18 | 92 | 16 | 9 | 15 | 25 | 0 | 0 | 60 | 11 | 4 | 15 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 47 | 78 | 27 | 3 | 95 | 3 | 91 | 2 | 14 | 0 | 0 | 57 | 11 | 4 | 2 | 2 | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 47 | 45 | 82 | 15 | 62 | 15 | 92 | 7 | 18 | 0 | 0 | 24 | 17 | 1 | 11 | 1 | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 9 | 17 | 62 | 62 | 36 | 47 | 23 | 58 | 10 | 82 | 8 | 23 | 10 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MINOR BASIN** MIDDLE AND LOWER SNAKE RIVER

**STATION LOCATION** COLUMBIA RIVER AT
PASCO, WASHINGTON

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFO per 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 16.0 | 9.3 | 8.1 | .8 | - | .6 | 1.1 | - | - | 70 | 71 | 8 | 3 | - | - | - | |
| 10 | 4 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| 10 | 9 | 61 | 17.0 | 9.1 | 8.2 | .6 | - | .6 | 1.1 | - | - | 68 | 68 | 6 | 3 | - | - | - | |
| 10 | 10 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 10 | 16 | 61 | 17.0 | 9.9 | 8.2 | 1.8 | - | .6 | 1.1 | - | - | 68 | 70 | 9 | 3 | 17 | .1 | 92 | |
| 10 | 23 | 61 | 15.0 | 9.7 | 8.1 | 1.0 | - | .6 | .9 | - | - | 68 | 69 | 7 | 3 | 8 | .0 | 50 | |
| 10 | 27 | 61 | - | - | - | - | 23 | - | - | - | - | - | - | - | - | - | - | - | |
| 10 | 30 | 61 | 15.0 | 10.0 | 8.1 | .8 | - | .6 | .8 | - | - | 70 | 70 | 9 | 3 | 17 | .0 | 93 | |
| 11 | 6 | 61 | 12.0 | 10.4 | 8.2 | 1.3 | - | .6 | 1.1 | - | - | 70 | 74 | 8 | 3 | 14 | .0 | 86 | |
| 11 | 13 | 61 | 13.0 | 10.2 | 8.2 | .3 | - | .6 | 1.0 | - | - | 68 | 70 | 9 | 3 | - | - | - | |
| 11 | 18 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .1 | 100 | |
| 11 | 20 | 61 | 10.0 | 10.4 | 8.2 | 1.2 | - | .6 | .9 | - | - | 72 | 74 | 8 | 3 | 9 | .0 | - | |
| 11 | 25 | 61 | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | |
| 11 | 27 | 61 | 10.0 | 10.6 | 8.0 | 1.2 | - | .5 | .9 | - | - | 68 | 76 | 9 | 5 | - | - | - | |
| 11 | 29 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 12 | 4 | 61 | 9.0 | 10.7 | 8.1 | 1.3 | 12 | .5 | 1.0 | - | 5 | 67 | 72 | 8 | 3 | 20 | - | - | 1 |
| 12 | 11 | 61 | 7.0 | 11.1 | 8.1 | 1.4 | 12 | .6 | .8 | - | 5 | 72 | 76 | 8 | 3 | 17 | - | - | 2 |
| 12 | 18 | 61 | 7.0 | 10.2 | 8.1 | 1.5 | 12 | .6 | .9 | - | - | 68 | 78 | 6 | 2 | 16 | .1 | 81 | |
| 12 | 25 | 61 | 7.0 | 11.2 | 8.1 | .6 | 12 | 1.0 | 1.2 | - | - | 74 | 80 | 6 | 2 | - | - | - | |
| 12 | 26 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 12 | 27 | 61 | - | - | - | - | - | - | - | - | 5 | - | - | - | - | 22 | - | - | |
| 1 | 2 | 62 | 7.0 | 12.8 | 8.1 | 1.4 | 11 | .6 | .9 | - | 5 | 71 | 76 | 8 | 3 | 22 | - | - | 1 |
| 1 | 8 | 62 | 7.0 | 11.4 | 8.0 | 1.6 | 11 | .6 | .9 | - | - | 68 | 73 | 5 | 2 | - | - | - | |
| 1 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 1 | 15 | 62 | 6.0 | 12.7 | 8.0 | 1.7 | 10 | .7 | 1.0 | - | 3 | 70 | 72 | 5 | 2 | 19 | .0 | - | |
| 1 | 22 | 62 | 3.0 | 13.2 | 8.1 | 2.3 | 13 | .6 | .9 | - | 3 | 70 | 74 | 9 | 4 | 23 | - | - | |
| 1 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 1 | 29 | 62 | 5.0 | 13.2 | 8.1 | 2.3 | 10 | 1.4 | 1.6 | - | 3 | 72 | 76 | 6 | 2 | 21 | - | - | |
| 2 | 5 | 62 | 6.0 | 13.0 | 8.1 | 2.2 | 10 | 1.3 | 1.6 | - | 3 | 71 | 76 | 5 | 2 | - | - | - | |
| 2 | 12 | 62 | 6.0 | 11.5 | 8.1 | 1.9 | 7 | - | - | - | - | 75 | 78 | 7 | 6 | - | - | - | |
| 2 | 13 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| 2 | 19 | 62 | 6.0 | 12.5 | 8.0 | 2.0 | 8 | - | - | - | - | 79 | 78 | 14 | 16 | - | - | - | |
| 2 | 26 | 62 | 6.0 | 11.4 | 8.0 | 1.9 | 129 | - | - | - | - | 79 | 79 | 6 | 6 | - | - | - | |
| 3 | 5 | 62 | 6.0 | 12.4 | 8.0 | 3.6 | 8 | 2.3 | 2.7 | .5 | - | 80 | 82 | 7 | 3 | 150 | .1 | - | |
| 3 | 12 | 62 | 6.0 | 12.0 | 8.0 | 2.8 | 12 | - | - | - | - | 80 | 81 | 8 | 4 | 23 | .0 | 128 | |
| 3 | 19 | 62 | 7.0 | 9.9 | 7.9 | 1.1 | 48 | 2.3 | 2.4 | .2 | 2 | 78 | 86 | 6 | 11 | 15 | .1 | - | |
| 3 | 26 | 62 | 8.0 | 11.2 | 7.9 | 1.5 | 1 | 2.3 | 2.5 | .6 | 3 | 80 | 84 | 11 | 16 | 23 | .2 | - | 4 |
| 4 | 2 | 62 | 8.3 | 10.9 | 8.0 | 2.7 | 11 | - | - | - | 2 | 79 | 84 | 11 | 6 | - | - | - | |
| 4 | 9 | 62 | 8.5 | 10.2 | 7.9 | 1.5 | 11 | 2.3 | 2.6 | - | 3 | 79 | 81 | 13 | 10 | 21 | .2 | - | |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** WASHINGTON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** MIDDLE AND LOWER SNAKE RIVER
**STATION LOCATION** COLUMBIA RIVER AT
PASCO, WASHINGTON 9

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 4 | 16 | 62 | 9.0 | 9.8 | 7.9 | - | 15 | - | - | .3 | 3 | 78 | 84 | 12 | 7 | 19 | .2 | - | 10 |
| 4 | 23 | 62 | 9.0 | 9.9 | 8.2 | 2.5 | 13 | - | - | - | 3 | 78 | 82 | 8 | 9 | - | - | - | 13 |
| 4 | 30 | 62 | 8.0 | 10.7 | 7.9 | - | - | - | - | - | - | 72 | 82 | 24 | 14 | - | - | - | 17 |
| 5 | 7 | 62 | 9.0 | - | 8.1 | - | - | - | - | - | - | 74 | 80 | 10 | 8 | - | - | - | - |
| 5 | 14 | 62 | 10.0 | 10.0 | 8.1 | 2.5 | - | - | - | - | 3 | 78 | 82 | 8 | 9 | 20 | .1 | - | 140 |
| 5 | 21 | 62 | 12.0 | 9.5 | 7.8 | 2.0 | - | - | - | - | 4 | 76 | 76 | 14 | 8 | 21 | - | - | 37 |
| 6 | 4 | 62 | 12.0 | 11.8 | 8.1 | 1.0 | - | 1.8 | 2.0 | - | 5 | 65 | 70 | 12 | 16 | 39 | - | - | 93 |
| 6 | 11 | 62 | 13.5 | 11.8 | 8.2 | 1.0 | - | - | - | - | - | 62 | 64 | 10 | 9 | - | - | - | 47 |
| 6 | 18 | 62 | 14.5 | 11.7 | 8.0 | 2.3 | - | 1.7 | 2.0 | - | - | 70 | 66 | 8 | 9 | - | - | - | 16 |
| 6 | 25 | 62 | 15.8 | 12.7 | 8.1 | 3.7 | 25 | 1.6 | 1.9 | .1 | - | 65 | 62 | 12 | 9 | - | - | - | *330 |
| 7 | 2 | 62 | 15.0 | 10.8 | 8.2 | .8 | - | 2.0 | 2.5 | - | - | 60 | 68 | 10 | 8 | - | - | - | 33 |
| 7 | 5 | 62 | 16.0 | 10.8 | 8.1 | .8 | 12 | 1.8 | 2.4 | .0 | - | 60 | 68 | 10 | 9 | - | - | 76 | - |
| 7 | 8 | 62 | 15.2 | 11.0 | 8.1 | 1.8 | 14 | 1.9 | 2.8 | .1 | - | 62 | 66 | 11 | 8 | - | - | 84 | - |
| 7 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 57 |
| 7 | 13 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 900 |
| 7 | 16 | 62 | 17.5 | 11.0 | 8.1 | 1.7 | - | 2.1 | 2.6 | - | 7 | 64 | 70 | 10 | 7 | 22 | .0 | - | - |
| 7 | 23 | 62 | 18.0 | 11.1 | - | 1.7 | - | 1.8 | 2.3 | - | - | 68 | 68 | 12 | 6 | - | - | - | 3 |
| 7 | 30 | 62 | 19.0 | 10.0 | 8.2 | 1.4 | - | - | - | - | 3 | 66 | 67 | 9 | 6 | 12 | .0 | - | 100 |
| 8 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 8 | 6 | 62 | 19.0 | 10.2 | 8.2 | 1.0 | - | - | - | - | - | 66 | 68 | 12 | 35 | - | - | - | - |
| 8 | 13 | 62 | 20.0 | 9.9 | 8.1 | 1.0 | - | 1.8 | 2.4 | - | - | 78 | 66 | 5 | 4 | 16 | .0 | - | 110 |
| 8 | 20 | 62 | 18.5 | 10.4 | 8.2 | .9 | - | 1.9 | 2.6 | - | - | 72 | 72 | 10 | 6 | - | - | - | *33 |
| 8 | 27 | 62 | 18.0 | 10.2 | 8.2 | 1.4 | - | - | - | - | - | 68 | 72 | 8 | 6 | - | - | - | 120 |
| 9 | 3 | 62 | 19.0 | 9.7 | - | .9 | - | 1.6 | 2.2 | - | - | 66 | 70 | 9 | 5 | - | - | - | - |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 30 |
| 9 | 10 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 9 | 17 | 62 | 18.5 | 9.2 | 8.2 | .3 | - | 1.7 | 2.0 | - | - | 64 | 72 | 8 | 6 | - | - | - | 140 |
| 9 | 24 | 62 | 18.3 | 9.5 | 8.2 | .5 | - | 1.7 | 2.0 | - | 3 | 66 | 72 | 8 | 5 | 12 | .0 | 94 | 73 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Pasco, Washington
Supplied by U.S. Geological Survey

STATE Washington

MAJOR BASIN Pacific Northwest

MINOR BASIN Middle and Lower Snake R

STATION LOCATION Columbia River at
Pasco, Washington

| Day | October | November | December | January | February | March | April | May | June | July | August | Sept |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 58.900 | 57.200 | 59.200 | 48.700 | 86.500 | 87.900 | 52.500 | 173.000 | 317.000 | 234.000 | 176.000 | 89 |
| 2 | 64.200 | 72.200 | 62.200 | 53.700 | 87.500 | 70.900 | 52.600 | 172.000 | 320.000 | 234.000 | 184.000 | 88 |
| 3 | 65.100 | 74.200 | 60.100 | 55.600 | 87.600 | 64.800 | 56.700 | 165.000 | 319.000 | 232.000 | 182.000 | 83 |
| 4 | 60.300 | 67.100 | 63.200 | 59.400 | 89.000 | 64.800 | 58.900 | 162.000 | 325.000 | 238.000 | 184.000 | 81 |
| 5 | 54.100 | 64.200 | 64.100 | 58.000 | 93.500 | 63.900 | 61.200 | 160.000 | 323.000 | 236.000 | 175.000 | 78 |
| 6 | 57.800 | 66.200 | 60.100 | 51.500 | 93.900 | 63.800 | 64.400 | 158.000 | 305.000 | 242.000 | 162.000 | 78 |
| 7 | 58.900 | 66.200 | 60.100 | 49.400 | 92.600 | 64.800 | 79.600 | 152.000 | 306.000 | 239.000 | 160.000 | 76 |
| 8 | 64.700 | 64.200 | 60.100 | 58.500 | 91.400 | 70.800 | 98.700 | 165.000 | 300.000 | 238.000 | 154.000 | 71 |
| 9 | 64.500 | 65.100 | 53.100 | 61.400 | 91.800 | 70.700 | 100.000 | 170.000 | 294.000 | 236.000 | 141.000 | 70 |
| 10 | 67.600 | 60.200 | 50.000 | 60.200 | 92.600 | 68.900 | 98.600 | 171.000 | 303.000 | 219.000 | 130.000 | 74 |
| 11 | 58.600 | 57.200 | 62.000 | 71.100 | 91.600 | 63.800 | 99.600 | 170.000 | 307.000 | 211.000 | 121.000 | 74 |
| 12 | 51.600 | 57.100 | 71.800 | 76.800 | 88.400 | 73.600 | 97.500 | 169.000 | 300.000 | 206.000 | 119.000 | 71 |
| 13 | 54.700 | 69.100 | 72.800 | 73.000 | 92.200 | 65.500 | 97.800 | 169.000 | 282.000 | 196.000 | 116.000 | 70 |
| 14 | 58.700 | 70.100 | 62.800 | 71.500 | 90.400 | 63.400 | 102.000 | 175.000 | 283.000 | 192.000 | 110.000 | 71 |
| 15 | 58.400 | 61.200 | 60.800 | 76.100 | 87.600 | 59.400 | 106.000 | 169.000 | 280.000 | 197.000 | 110.000 | 68 |
| 16 | 60.400 | 64.100 | 63.900 | 80.800 | 83.800 | 58.400 | 105.000 | 167.000 | 282.000 | 197.000 | 107.000 | 62 |
| 17 | 64.200 | 60.100 | 68.100 | 84.400 | 83.600 | 56.400 | 119.000 | 160.000 | 282.000 | 197.000 | 107.000 | 68 |
| 18 | 74.100 | 57.100 | 63.700 | 88.200 | 74.600 | 56.400 | 145.000 | 161.000 | 268.000 | 193.000 | 109.000 | 67 |
| 19 | 82.200 | 66.000 | 65.800 | 88.900 | 72.400 | 63.500 | 143.000 | 163.000 | 257.000 | 193.000 | 108.000 | 65 |
| 20 | 88.900 | 71.000 | 65.800 | 86.200 | 76.200 | 71.600 | 138.000 | 164.000 | 257.000 | 187.000 | 107.000 | 62 |
| 21 | 67.800 | 71.000 | 54.100 | 82.600 | 78.100 | 77.400 | 144.000 | 164.000 | 259.000 | 178.000 | 110.000 | 61 |
| 22 | 64.800 | 70.000 | 52.800 | 84.800 | 72.900 | 72.400 | 152.000 | 171.000 | 261.000 | 172.000 | 113.000 | 62 |
| 23 | 71.700 | 61.900 | 52.400 | 87.700 | 73.800 | 75.500 | 155.000 | 178.000 | 260.000 | 169.000 | 115.000 | 60 |
| 24 | 74.600 | 60.200 | 50.200 | 85.700 | 66.700 | 68.600 | 156.000 | 197.000 | 258.000 | 172.000 | 115.000 | 65 |
| 25 | 76.400 | 62.400 | 48.400 | 86.200 | 68.500 | 58.500 | 165.000 | 216.000 | 259.000 | 166.000 | 111.000 | 68 |
| 26 | 75.500 | 66.300 | 53.200 | 87.500 | 74.300 | 57.800 | 175.000 | 239.000 | 246.000 | 166.000 | 109.000 | 69 |
| 27 | 76.400 | 70.100 | 52.700 | 87.900 | 71.100 | 55.100 | 186.000 | 259.000 | 242.000 | 161.000 | 109.000 | 69 |
| 28 | 78.400 | 70.100 | 52.600 | 89.500 | 82.900 | 57.000 | 178.000 | 275.000 | 239.000 | 165.000 | 101.000 | 65 |
| 29 | 76.400 | 64.200 | 52.400 | 88.900 |  | 55.700 | 173.000 | 294.000 | 234.000 | 166.000 | 97.700 | 57 |
| 30 | 74.300 | 60.200 | 53.300 | 88.800 |  | 55.500 | 177.000 | 302.000 | 233.000 | 172.000 | 95.800 | 56 |
| 31 | 66.300 |  | 48.300 | 89.400 |  | 53.400 |  | 308.000 |  | 183.000 | 88.900 |  |

Computed as sum of Columbia River at Trinidad, Washington plus Yakima River at Kiona, Washington.

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**MAJOR BASIN** PACIFIC NORTHWEST

**MINOR BASIN** COLUMBIA RIVER ABOVE YAKIMA RIVER

**STATION LOCATION** COLUMBIA RIVER AT
WENATCHEE, WASHINGTON

| DATE OF SAMPLE | | | | | | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | GALLONS FILTERED | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 4 | 61 | 10 | 11 | 4117 | 81 | 25 | 56 | - | - | - | - | - | - | - | - | - | - | |
| 11 | 7 | 61 | 11 | 14 | 3801 | 97 | 27 | 70 | - | - | - | - | - | - | - | - | - | - | |
| 12 | 19 | 61 | 12 | 26 | 4254 | 64 | 22 | 42 | - | - | - | - | - | - | - | - | - | - | |
| 12 | 19 | 61 | | * | 12172 | 80 | 24 | 56 | 1 | 6 | 11 | 5 | 1 | 5 | 0 | 2 | 1 | 1 | |
| 1 | 30 | 62 | 2 | 6 | 4162 | 71 | 16 | 55 | - | - | - | - | - | - | - | - | - | - | |
| 2 | 27 | 62 | 3 | 6 | 4307 | 70 | 17 | 53 | - | - | - | - | - | - | - | - | - | - | |
| 2 | 27 | 62 | | * | 8469 | 70 | 16 | 54 | 0 | 4 | 7 | 2 | 1 | 4 | 0 | 2 | 1 | 0 | |
| 4 | 3 | 62 | 4 | 10 | * | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 5 | 1 | 62 | 5 | 8 | 4664 | 82 | 36 | 46 | - | - | - | - | - | - | - | - | - | - | |
| 6 | 5 | 62 | 6 | 12 | 3639 | 88 | 45 | 43 | - | - | - | - | - | - | - | - | - | - | |
| 6 | 5 | 62 | | * | 8303 | 84 | 40 | 44 | 1 | 10 | 16 | 7 | 2 | 7 | 0 | 4 | 2 | 0 | |
| 7 | 17 | 62 | 7 | 31 | 4814 | 86 | 40 | 46 | - | - | - | - | - | - | - | - | - | - | |
| 9 | 12 | 62 | 9 | 18 | 3207 | 113 | 35 | 78 | - | - | - | - | - | - | - | - | - | - | |
| 9 | 12 | 62 | | * | 8021 | 97 | 38 | 59 | 1 | 8 | 16 | 8 | 2 | 5 | 1 | 5 | 2 | 0 | |

* FLOW UNKNOWN

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** WASHINGTON

**MAJOR BASIN** PACIFIC NORTHWEST

**MINOR BASIN** COLUMBIA RIVER ABOVE YAKI

**STATION LOCATION** COLUMBIA RIVER AT
WENATCHEE, WASHINGTON

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLAN | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS AC | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± |
| 10 | 4 | 61 | 10 | 20 | - | - | - | - | - | - | 1 | 5 | 10 | 6 | 11 | 8 | | | | |
| 10 | 11 | 61 | 10 | 30 | - | - | - | - | - | - | 5 | 5 | 3 | 6 | 8 | 8 | | | | |
| 10 | 18 | 61 | 10 | 31 | - | - | - | - | - | - | 0 | 5 | 0 | 6 | 0 | 8 | | | | |
| 10 | 24 | 61 | 11 | 3 | 0 | 1 | 1 | 1 | 1 | 1 | 4 | 4 | 6 | 4 | 10 | 6 | | | | |
| 10 | 31 | 61 | 11 | 11 | - | - | - | - | - | - | 2 | 5 | 0 | 6 | 2 | 8 | | | | |
| 11 | 7 | 61 | 11 | 24 | - | - | - | - | - | - | 3 | 5 | 7 | 5 | 10 | 7 | | | | |
| 11 | 14 | 61 | 11 | 28 | - | - | - | - | - | - | 1 | 4 | 7 | 5 | 8 | 6 | | | | |
| 11 | 21 | 61 | 11 | 30 | - | - | - | - | - | - | 3 | 6 | 4 | 6 | 7 | 8 | | | | |
| 11 | 28 | 61 | 12 | 6 | 0 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 6 | 4 | 9 | 6 | | | | |
| 12 | 5 | 61 | 12 | 14 | - | - | - | - | - | - | 4 | 4 | 10 | 4 | 14 | 6 | | | | |
| 12 | 12 | 61 | 12 | 21 | - | - | - | - | - | - | 3 | 5 | 4 | 6 | 7 | 8 | | | | |
| 12 | 19 | 61 | 12 | 28 | - | - | - | - | - | - | 3 | 5 | 2 | 6 | 5 | 8 | | | | |
| 12 | 26 | 61 | 1 | 4 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 4 | 12 | 4 | 13 | 6 | | | | |
| 1 | 2 | 62 | 1 | 11 | - | - | - | - | - | - | 4 | 5 | 8 | 6 | 12 | 8 | | | | |
| 1 | 10 | 62 | 1 | 19 | - | - | - | - | - | - | 2 | 6 | 7 | 6 | 9 | 8 | | | | |
| 1 | 16 | 62 | 1 | 25 | - | - | - | - | - | - | 18 | 6 | 7 | 6 | 25 | 8 | | | | |
| 1 | 23 | 62 | 2 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 4 | 8 | 4 | 14 | 5 | | | | |
| 1 | 30 | 62 | 2 | 9 | - | - | - | - | - | - | 1 | 5 | 8 | 6 | 9 | 8 | | | | |
| 2 | 6 | 62 | 2 | 15 | - | - | - | - | - | - | 6 | 5 | 5 | 6 | 11 | 8 | | | | |
| 2 | 13 | 62 | 2 | 27 | - | - | - | - | - | - | 7 | 4 | 9 | 5 | 16 | 6 | | | | |
| 2 | 20 | 62 | 3 | 2 | - | - | - | - | - | - | 3 | 4 | 7 | 4 | 10 | 6 | | | | |
| 2 | 27 | 62 | 3 | 15 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 5 | 9 | 7 | 9 | 9 | | | | |
| 3 | 6 | 62 | 3 | 19 | - | - | - | - | - | - | 8 | 5 | 7 | 6 | 15 | 8 | | | | |
| 3 | 13 | 62 | 3 | 26 | - | - | - | - | - | - | 1 | 5 | 7 | 6 | 8 | 7 | | | | |
| 3 | 27 | 62 | 4 | 9 | 0 | 1 | 1 | 1 | 1 | 1 | 7 | 4 | 16 | 5 | 23 | 6 | | | | |
| 4 | 3 | 62 | 4 | 16 | - | - | - | - | - | - | 0 | 6 | 9 | 6 | 9 | 9 | | | | |
| 4 | 10 | 62 | 4 | 25 | - | - | - | - | - | - | 3 | 5 | 9 | 6 | 12 | 7 | | | | |
| 4 | 17 | 62 | 4 | 30 | - | - | - | - | - | - | 2 | 5 | 9 | 6 | 11 | 7 | | | | |
| 4 | 24 | 62 | 7 | 18 | 0 | 0 | 2 | 2 | 2 | 2 | 0 | 7 | 6 | 8 | 6 | 11 | | | | |
| 5 | 1 | 62 | 6 | 4 | - | - | - | - | - | - | 2 | 6 | 6 | 7 | 8 | 9 | | | | |
| 5 | 8 | 62 | 6 | 19 | - | - | - | - | - | - | 5 | 6 | 0 | 6 | 5 | 8 | | | | |
| 5 | 22 | 62 | 7 | 25 | - | - | - | - | - | - | 1 | 6 | 6 | 6 | 7 | 8 | | | | |
| 5 | 29 | 62 | 6 | 30 | 0 | 0 | 1 | 1 | 1 | 1 | 7 | 3 | 7 | 4 | 14 | 5 | | | | |
| 6 | 5 | 62 | 7 | 6 | - | - | - | - | - | - | 1 | 5 | 6 | 5 | 7 | 7 | | | | |
| 6 | 12 | 62 | 7 | 10 | - | - | - | - | - | - | 7 | 5 | 11 | 7 | 18 | 9 | | | | |
| 6 | 19 | 62 | 7 | 19 | - | - | - | - | - | - | 11 | 6 | 11 | 6 | 22 | 8 | | | | |
| 6 | 26 | 62 | 7 | 24 | 0 | 0 | 1 | 1 | 1 | 1 | 6 | 5 | 5 | 6 | 11 | 7 | | | | |
| 7 | 17 | 62 | 9 | 21 | - | - | - | - | - | - | 2 | 6 | 3 | 6 | 5 | 8 | | | | |
| 7 | 24 | 62 | 9 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 8 | 6 | 8 | 7 | | | | |
| 7 | 31 | 62 | 8 | 23 | - | - | - | - | - | - | 3 | 5 | 2 | 5 | 5 | 7 | | | | |

**STATION LOCATION** COLUMBIA RIVER AT
WENATCHEE, WASHINGTON 10

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 7 | 62 | 8 | 30 | - | - | - | - | - | - | 5 | 7 | 8 | 8 | 13 | 11 | | | | | | |
| 8 | 14 | 62 | 8 | 30 | - | - | - | - | - | - | 0 | 16 | 36 | 15 | 36 | 22 | | | | | | |
| 8 | 21 | 62 | 9 | 19 | - | - | - | - | - | - | 1 | 5 | 6 | 6 | 7 | 7 | | | | | | |
| 8 | 28 | 62 | 9 | 30 | 0 | 1 | 0 | 1 | 0 | 1 | 10 | 6 | 2 | 6 | 12 | 8 | | | | | | |
| 9 | 4 | 62 | 9 | 28 | - | - | - | - | - | - | 6 | 6 | 11 | 7 | 17 | 9 | | | | | | |
| 9 | 12 | 62 | 10 | 8 | - | - | - | - | - | - | 2 | 6 | 5 | 7 | 7 | 9 | | | | | | |
| 9 | 18 | 62 | 10 | 10 | - | - | - | - | - | - | 1 | 7 | 7 | 7 | 8 | 10 | | | | | | |
| 9 | 25 | 62 | 10 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | 11 | 3 | 16 | 4 | | | | | | |

**STATION LOCATION** COLUMBIA RIVER AT
WENATCHEE, WASHINGTON

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See te* | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE - GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 4 | 61 | 2400 | 0 | 0 | 60 | 0 | 60 | 0 | 1260 | 1060 | 60 | 1200 | 69 | 3 | 84 | 1 | 73 | 1 | 92 | 1 | 88 | 1 | | | | | | |
| 10 | 18 | 61 | 400 | 0 | 0 | 0 | 0 | 40 | 0 | 120 | 190 | 20 | 210 | | | | | | | | | | | | | | | | |
| 11 | 7 | 61 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 120 | 20 | 40 | | | | | | | | | | | | | | | | |
| 11 | 21 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 20 | 0 | | | | | | | | | | | | | | | | |
| 12 | 5 | 61 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 100 | | | | | | | | | | | | | | | | |
| 12 | 19 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 40 | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 1300 | 0 | 0 | 90 | 0 | 140 | 0 | 160 | 950 | 70 | 70 | 92 | 2 | | | | | | | | | | | | | | |
| 1 | 16 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 190 | 0 | 100 | | | | | | | | | | | | | | | | |
| 2 | 6 | 62 | 200 | 0 | 0 | 0 | 0 | 20 | 0 | 60 | 170 | 0 | 80 | | | | | | | | | | | | | | | | |
| 2 | 20 | 62 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 500 | 0 | 270 | 77 | 1 | | | | | | | | | | | | | | |
| 3 | 6 | 62 | 300 | 0 | 0 | 0 | 0 | 40 | 0 | 60 | 190 | 0 | 90 | | | | | | | | | | | | | | | | |
| 3 | 20 | 62 | 900 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 770 | 0 | 60 | 77 | 3 | | | | | | | | | | | | | | |
| 4 | 3 | 62 | 1500 | 0 | 0 | 40 | 0 | 0 | 0 | 210 | 1220 | 0 | 250 | 77 | 3 | 71 | 1 | | | | | | | | | | | | |
| 4 | 17 | 62 | 1200 | 0 | 0 | 0 | 0 | 0 | 0 | 420 | 820 | 20 | 300 | 71 | 2 | | | | | | | | | | | | | | |
| 5 | 8 | 62 | 6900 | 20 | 0 | 100 | 20 | 80 | 0 | 1220 | 5400 | 80 | 100 | 77 | 5 | 92 | 4 | 88 | 3 | 69 | 3 | 71 | 2 | 84 | 1 | 73 | 1 | | |
| 5 | 22 | 62 | 5100 | 0 | 0 | 0 | 0 | 0 | 20 | 1120 | 3990 | 630 | 460 | 69 | 3 | 71 | 1 | 92 | 1 | 73 | 1 | 82 | 1 | 81 | 1 | | | | |
| 6 | 5 | 62 | 4300 | 0 | 0 | 0 | 0 | 0 | 0 | 780 | 3570 | 570 | 1180 | 77 | 5 | 69 | 2 | 88 | 1 | 92 | 1 | | | | | | | | |
| 6 | 12 | 62 | 4700 | 40 | 0 | 0 | 0 | 20 | 60 | 1370 | 3170 | 190 | 250 | 77 | 4 | 69 | 3 | 92 | 2 | 93 | 2 | | | | | | | | |
| 7 | 3 | 62 | 3700 | 0 | 0 | 20 | 0 | 150 | 0 | 580 | 2980 | 440 | 520 | 92 | 4 | 93 | 3 | 77 | 1 | 84 | 1 | | | | | | | | |
| 7 | 10 | 62 | 3600 | 500 | 40 | 0 | 0 | 40 | 0 | 410 | 2610 | 210 | 150 | 77 | 4 | 64 | 2 | 93 | 2 | 92 | 1 | 69 | 1 | 68 | 1 | | | | |
| 8 | 7 | 62 | 1400 | 0 | 0 | 100 | 0 | 0 | 0 | 40 | 1300 | 0 | 290 | 92 | 2 | | | | | | | | | | | | | | |
| 8 | 21 | 62 | 900 | 0 | 0 | 0 | 0 | 0 | 0 | 300 | 630 | 0 | 420 | 84 | 2 | 69 | 1 | 88 | 1 | 92 | 1 | | | | | | | | |
| 9 | 4 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 80 | 130 | 80 | | | | | | | | | | | | | | | | |
| 9 | 18 | 62 | 200 | 10 | 0 | 60 | 0 | 0 | 0 | 40 | 120 | 40 | 230 | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUM-BER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | NUM-BER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 4 | 61 | 62 | 33 | 47 | 17 | 2 | 8 | 92 | 5 | 37 | 0 | 0 | 189 | 15 | 6 | 46 | 1 | | | | | | | 1 | | | | | | | 3 | 1 |
| 10 | 18 | 61 | 62 | 20 | 58 | 14 | 2 | 10 | 47 | 7 | 49 | 190 | 0 | 28 | 20 | 3 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 7 | 61 | 2 | 16 | 62 | 16 | 58 | 9 | 93 | 5 | 54 | 0 | 0 | 10 | 15 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 21 | 61 | 62 | 25 | 2 | 12 | 70 | 8 | 47 | 8 | 47 | 0 | 0 | 1 | | | | | | | | | | | - | | | | | | | - | - |
| 12 | 5 | 61 | 62 | 25 | 47 | 15 | 95 | 13 | 2 | 7 | 40 | 0 | 0 | 4 | | | | | | | | | | | - | | | | | | | - | - |
| 12 | 19 | 61 | 95 | 39 | 62 | 13 | 71 | 5 | 47 | 4 | 39 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 95 | 12 | 89 | 9 | 91 | 9 | 47 | 8 | 62 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 16 | 62 | 2 | 11 | 95 | 9 | 62 | 9 | 92 | 6 | 65 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 6 | 62 | 95 | 32 | 2 | 14 | 9 | 13 | 47 | 6 | 35 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 20 | 62 | 95 | 41 | 62 | 12 | 9 | 4 | 2 | 4 | 39 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 6 | 62 | 95 | 43 | 9 | 26 | 61 | 5 | 62 | 3 | 23 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 20 | 62 | 9 | 29 | 95 | 28 | 92 | 9 | 47 | 5 | 29 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 3 | 62 | 9 | 45 | 95 | 10 | 47 | 5 | 31 | 4 | 36 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 17 | 62 | 9 | 24 | 82 | 13 | 95 | 9 | 2 | 8 | 46 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 5 | 8 | 62 | 9 | 37 | 61 | 20 | 89 | 11 | 95 | 11 | 21 | 290 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 22 | 62 | 61 | 32 | 9 | 22 | 95 | 14 | 47 | 10 | 22 | 230 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 5 | 62 | 9 | 31 | 95 | 28 | 61 | 22 | 47 | 4 | 15 | 0 | 0 | 10 | 15 | 1 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 12 | 62 | 95 | 51 | 61 | 18 | 47 | 12 | 9 | 9 | 10 | 0 | 0 | 6 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 7 | 3 | 62 | 95 | 30 | 61 | 18 | 47 | 14 | 9 | 11 | 27 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 7 | 10 | 62 | 27 | 53 | 28 | 13 | 95 | 10 | 61 | 6 | 18 | 0 | 0 | 19 | 11 | 2 | 15 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 7 | 62 | 47 | 34 | 62 | 20 | 92 | 8 | 45 | 7 | 31 | 0 | 0 | 60 | 11 | 4 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 21 | 62 | 47 | 85 | 62 | 5 | 27 | 2 | 2 | 1 | 7 | 0 | 0 | 57 | 11 | 3 | 13 | 2 | 15 | 1 | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 62 | 38 | 82 | 16 | 47 | 11 | 92 | 9 | 26 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 18 | 62 | 47 | 31 | 62 | 23 | 2 | 10 | 92 | 3 | 33 | 0 | 0 | 81 | 15 | 4 | | | | | | | | | 0 | | | | | | | 12 | 0 |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** WASHINGTON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** COLUMBIA RIVER ABOVE YAKIMA RIVE
**STATION LOCATION** COLUMBIA RIVER AT
WENATCHEE, WASHINGTON

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | |
| 10 | 4 | 61 | 17.3 | - | 8.1 | - | - | - | - | - | - | 53 | 66 | - | - | - | - | 91 |
| 10 | 11 | 61 | 16.5 | - | 8.0 | - | 14 | - | - | - | 6 | 52 | 63 | 0 | - | 21 | .1 | 87 |
| 10 | 18 | 61 | 16.1 | - | 7.8 | - | - | - | - | - | - | 54 | 60 | 5 | - | - | - | 86 |
| 10 | 24 | 61 | 14.8 | - | 7.8 | - | - | - | - | - | 3 | 55 | 66 | - | 0 | 14 | .0 | 81 |
| 10 | 31 | 61 | 14.3 | - | 8.0 | - | - | - | - | - | 5 | 56 | 66 | 0 | - | 14 | .4 | 83 |
| 11 | 7 | 61 | 12.6 | - | 8.0 | - | - | - | - | - | 2 | 56 | 67 | 5 | 0 | 10 | .1 | 101 |
| 11 | 14 | 61 | 12.1 | - | 7.9 | - | - | - | - | - | 5 | 56 | 67 | 5 | - | 16 | .2 | 94 |
| 11 | 21 | 61 | 10.3 | - | 7.9 | - | - | - | - | - | 4 | 57 | 68 | 5 | - | 17 | .3 | 78 |
| 11 | 28 | 61 | 9.4 | - | 7.9 | - | - | - | - | - | 3 | 57 | 68 | 0 | - | 12 | .1 | 91 |
| 12 | 5 | 61 | 9.3 | - | 7.9 | - | - | - | - | - | 4 | 58 | 69 | - | - | 20 | - | 85 |
| 12 | 12 | 61 | 7.9 | - | 7.9 | - | - | - | - | - | 3 | 58 | 69 | 0 | - | 11 | .1 | 91 |
| 12 | 19 | 61 | 6.7 | - | 8.0 | - | - | - | - | - | 5 | 60 | 71 | 5 | - | 16 | .1 | 79 |
| 12 | 26 | 61 | 6.6 | - | 8.0 | - | 10 | - | - | - | - | 59 | 67 | - | - | - | - | 86 |
| 1 | 2 | 62 | 6.0 | - | 7.9 | - | - | - | - | - | - | 57 | 68 | - | - | - | - | 84 |
| 1 | 10 | 62 | 5.9 | - | 7.9 | - | - | - | - | - | 5 | 53 | 64 | - | - | 24 | - | 84 |
| 1 | 16 | 62 | 5.0 | - | 7.8 | - | - | - | - | - | - | 58 | 69 | - | - | 16 | .0 | 90 |
| 1 | 23 | 62 | 3.1 | - | 7.9 | - | - | - | - | - | 6 | 55 | 70 | - | - | 22 | - | 89 |
| 1 | 30 | 62 | 4.7 | - | 7.8 | - | - | - | - | - | 6 | 59 | 70 | 5 | 25 | 18 | .1 | 92 |
| 2 | 6 | 62 | 3.8 | - | 7.9 | - | 6 | - | - | - | 3 | 61 | 72 | - | - | 20 | - | 91 |
| 2 | 13 | 62 | 3.9 | - | 7.9 | - | - | - | - | - | 7 | 62 | 75 | 5 | - | 27 | - | 106 |
| 2 | 20 | 62 | 3.7 | - | 7.9 | - | - | - | - | - | 3 | 64 | 74 | 5 | - | 19 | - | 91 |
| 2 | 27 | 62 | 2.5 | - | 8.1 | - | - | - | - | - | 5 | 67 | 78 | 0 | - | 16 | - | 108 |
| 3 | 5 | 62 | 2.6 | - | 8.0 | - | - | - | - | - | - | 67 | 78 | - | - | - | - | 102 |
| 3 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 13 | 62 | 3.3 | - | 8.0 | - | - | - | - | - | - | 68 | 79 | - | - | - | - | 103 |
| 3 | 20 | 62 | 4.0 | - | 7.8 | - | - | - | - | - | - | 64 | 80 | - | - | - | - | 100 |
| 3 | 27 | 62 | 4.2 | - | 7.5 | - | - | - | - | - | 4 | 68 | 80 | 5 | - | 21 | - | 88 |
| 4 | 3 | 62 | 5.7 | - | 7.9 | - | - | - | - | - | 13 | 67 | 75 | 5 | - | 230 | .1 | 109 |
| 4 | 10 | 62 | 5.9 | - | 7.8 | - | 6 | - | - | - | - | 63 | 76 | - | - | - | - | 117 |
| 4 | 17 | 62 | 6.3 | - | 7.9 | - | 11 | - | - | - | 10 | 68 | 76 | 25 | - | 48 | .0 | 116 |
| 4 | 24 | 62 | 6.5 | - | 7.8 | - | - | - | - | - | - | 66 | 74 | - | - | - | - | 70 |
| 5 | 1 | 62 | 8.1 | - | 7.9 | - | - | - | - | - | 6 | 65 | 75 | 0 | - | 22 | - | 89 |
| 5 | 8 | 62 | 9.3 | - | 7.6 | - | - | - | - | - | 4 | 58 | 70 | 10 | - | 23 | .0 | 113 |
| 5 | 15 | 62 | 10.5 | - | 8.1 | - | - | - | - | - | - | 59 | 66 | - | - | - | - | 100 |
| 5 | 22 | 62 | 10.8 | - | 8.0 | - | - | - | - | - | - | 55 | 62 | 10 | - | 23 | .0 | 100 |
| 5 | 29 | 62 | 11.0 | - | 8.0 | - | - | - | - | - | - | 55 | 62 | - | - | - | - | 122 |
| 6 | 5 | 62 | 12.0 | - | 7.9 | - | - | - | - | - | - | 56 | 63 | - | - | - | - | 101 |
| 6 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 19 | 62 | 13.1 | - | 7.9 | - | - | - | - | - | 12 | 57 | 66 | 5 | *25 | 39 | .3 | 100 |

**MINOR BASIN** COLUMBIA RIVER ABOVE YAKIMA RIVER

**STATION LOCATION** COLUMBIA RIVER AT

WENATCHEE, WASHINGTON 10

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 26 | 62 | 14.3 | - | 8.0 | - | - | - | - | - | - | 53 | 60 | - | - | - | - | 77 | 40 |
| 7 | 3 | 62 | 14.0 | - | 8.0 | - | - | - | - | - | - | 54 | 60 | - | - | - | - | 83 | *30 |
| 7 | 10 | 62 | 15.9 | - | 7.9 | - | - | - | - | - | - | 54 | 62 | - | - | - | - | 77 | - |
| 7 | 11 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 73 |
| 7 | 17 | 62 | 16.3 | - | 7.9 | - | - | - | - | - | 5 | 55 | 62 | 5 | 25 | 15 | .0 | 84 | 7 |
| 7 | 24 | 62 | 21.6 | - | 8.1 | - | - | - | - | - | 3 | 54 | 62 | 0 | 25 | 12 | .0 | 79 | 290 |
| 7 | 31 | 62 | 18.0 | - | 8.1 | - | - | - | - | - | 3 | 55 | 60 | 5 | 25 | 12 | .5 | 76 | 110 |
| 8 | 7 | 62 | 17.7 | - | 7.9 | - | - | - | - | - | - | 51 | 63 | - | - | - | - | 91 | 280 |
| 8 | 14 | 62 | 17.2 | - | 8.1 | - | - | - | - | - | 2 | 53 | 59 | 0 | 25 | 14 | .0 | 72 | 54 |
| 8 | 21 | 62 | 17.5 | - | 8.2 | - | - | - | - | - | 3 | 55 | 61 | 0 | 25 | 13 | .0 | 80 | 160 |
| 8 | 28 | 62 | 17.6 | - | 8.1 | - | - | - | - | - | 6 | 56 | 61 | 10 | 25 | 14 | .0 | 78 | 7 |
| 9 | 4 | 62 | 17.6 | - | 8.1 | - | - | - | - | - | - | 56 | 62 | - | - | - | - | 69 | 150 |
| 9 | 12 | 62 | 16.6 | - | 7.9 | - | - | - | - | - | 3 | 55 | 63 | 5 | 25 | - | - | 83 | - |
| 9 | 18 | 62 | 17.0 | - | 8.0 | - | - | - | - | - | 4 | 56 | 62 | 0 | 25 | 15 | .0 | 79 | 39 |
| 9 | 25 | 62 | 18.0 | - | 8.1 | - | - | - | - | - | 3 | 55 | 62 | 0 | *25 | 14 | .0 | 88 | 530 |

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Trinidad, Washington
Operated by U.S. Geological Survey.

MINOR BASIN Columbia River above Ya

STATION LOCATION Columbia River at
Wenatchee, Washington

| Day | October | November | December | January | February | March | April | May | June | July | August | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 57.000 | 55.000 | 57.000 | 45.000 | 83.000 | 85.000 | 50.000 | 171.000 | 312.000 | 232.000 | 175.000 | 8 |
| 2 | 62.000 | 70.000 | 60.000 | 50.000 | 84.000 | 68.000 | 50.000 | 170.000 | 316.000 | 232.000 | 182.000 | 8 |
| 3 | 63.000 | 72.000 | 58.000 | 52.000 | 84.000 | 62.000 | 54.000 | 163.000 | 315.000 | 231.000 | 180.000 | 8 |
| 4 | 58.000 | 65.000 | 61.000 | 56.000 | 85.000 | 62.000 | 56.000 | 160.000 | 321.000 | 236.000 | 182.000 | 8 |
| 5 | 52.000 | 62.000 | 62.000 | 54.000 | 88.000 | 61.000 | 58.000 | 158.000 | 319.000 | 234.000 | 173.000 | 7 |
| 6 | 56.000 | 64.000 | 58.000 | 47.000 | 88.000 | 61.000 | 61.000 | 156.000 | 302.000 | 241.000 | 160.000 | 7 |
| 7 | 56.000 | 64.000 | 58.000 | 45.000 | 87.000 | 62.000 | 76.000 | 150.000 | 303.000 | 237.000 | 158.000 | 7 |
| 8 | 62.000 | 62.000 | 58.000 | 54.000 | 86.000 | 68.000 | 91.000 | 163.000 | 297.000 | 236.000 | 152.000 | 7 |
| 9 | 63.000 | 63.000 | 51.000 | 54.000 | 87.000 | 68.000 | 89.000 | 168.000 | 292.000 | 234.000 | 139.000 | 6 |
| 10 | 66.000 | 58.000 | 48.000 | 51.000 | 88.000 | 66.000 | 90.000 | 168.000 | 301.000 | 218.000 | 128.000 | 7 |
| 11 | 57.000 | 55.000 | 60.000 | 63.000 | 87.000 | 61.000 | 93.000 | 167.000 | 304.000 | 210.000 | 119.000 | 7 |
| 12 | 50.000 | 55.000 | 70.000 | 70.000 | 84.000 | 71.000 | 92.000 | 166.000 | 297.000 | 205.000 | 117.000 | 7 |
| 13 | 53.000 | 67.000 | 71.000 | 67.000 | 88.000 | 63.000 | 93.000 | 166.000 | 279.000 | 195.000 | 114.000 | 6 |
| 14 | 57.000 | 68.000 | 61.000 | 66.000 | 86.000 | 61.000 | 98.000 | 172.000 | 280.000 | 191.000 | 108.000 | 7 |
| 15 | 56.000 | 59.000 | 59.000 | 71.000 | 83.000 | 57.000 | 102.000 | 166.000 | 276.000 | 196.000 | 108.000 | 6 |
| 16 | 58.000 | 62.000 | 62.000 | 76.000 | 79.000 | 56.000 | 100.000 | 164.000 | 278.000 | 196.000 | 105.000 | 6 |
| 17 | 62.000 | 58.000 | 66.000 | 80.000 | 79.000 | 54.000 | 114.000 | 158.000 | 278.000 | 196.000 | 105.000 | 6 |
| 18 | 72.000 | 55.000 | 62.000 | 84.000 | 70.000 | 54.000 | 140.000 | 159.000 | 264.000 | 192.000 | 107.000 | 6 |
| 19 | 80.000 | 64.000 | 64.000 | 85.000 | 68.000 | 61.000 | 139.000 | 161.000 | 252.000 | 192.000 | 106.000 | 6 |
| 20 | 86.000 | 69.000 | 64.000 | 83.000 | 72.000 | 69.000 | 134.000 | 161.000 | 252.000 | 186.000 | 105.000 | 6 |
| 21 | 65.000 | 69.000 | 52.000 | 80.000 | 74.000 | 75.000 | 139.000 | 161.000 | 254.000 | 176.000 | 108.000 | 6 |
| 22 | 62.000 | 68.000 | 50.000 | 82.000 | 69.000 | 70.000 | 148.000 | 168.000 | 257.000 | 171.000 | 111.000 | 6 |
| 23 | 69.000 | 60.000 | 50.000 | 85.000 | 70.000 | 73.000 | 152.000 | 176.000 | 256.000 | 168.000 | 113.000 | 5 |
| 24 | 72.000 | 58.000 | 48.000 | 83.000 | 63.000 | 66.000 | 153.000 | 195.000 | 255.000 | 170.000 | 113.000 | 6 |
| 25 | 74.000 | 60.000 | 46.000 | 83.000 | 65.000 | 56.000 | 162.000 | 212.000 | 256.000 | 165.000 | 109.000 | 6 |
| 26 | 73.000 | 64.000 | 50.000 | 84.000 | 71.000 | 55.000 | 172.000 | 235.000 | 243.000 | 165.000 | 107.000 | 6 |
| 27 | 74.000 | 68.000 | 49.000 | 84.000 | 68.000 | 52.000 | 183.000 | 254.000 | 239.000 | 160.000 | 107.000 | 6 |
| 28 | 76.000 | 68.000 | 49.000 | 85.000 | 80.000 | 54.000 | 176.000 | 270.000 | 236.000 | 164.000 | 99.000 | 6 |
| 29 | 74.000 | 62.000 | 49.000 | 85.000 |  | 53.000 | 170.000 | 289.000 | 232.000 | 165.000 | 96.000 | 5 |
| 30 | 72.000 | 58.000 | 50.000 | 85.000 |  | 53.000 | 175.000 | 297.000 | 231.000 | 171.000 | 94.000 | 5 |
| 31 | 64.000 |  | 45.000 | 86.000 |  | 51.000 |  | 303.000 |  | 182.000 | 87.000 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** WASHINGTON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** COLUMBIA RIVER ABOVE YAKIMA RIVER
**STATION LOCATION** COLUMBIA RIVER AT
NORTHPORT, WASHINGTON 112

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 5 | 17 | 62 | 6 | 25 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 5 | 9 | 6 | 13 | 8 | | | | | | |
| 5 | 21 | 62 | 6 | 27 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 6 | 5 | 6 | 6 | 8 | | | | | | |
| 5 | 28 | 62 | 7 | 3 | 0 | 1 | 0 | 1 | 0 | 1 | 15 | 5 | 13 | 6 | 28 | 7 | | | | | | |
| 6 | 4 | 62 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 | 4 | 7 | 8 | 9 | | | | | | |
| 6 | 11 | 62 | 8 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 8 | 6 | 11 | 7 | 19 | 9 | | | | | | |
| 6 | 18 | 62 | 7 | 23 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 4 | 2 | 5 | 4 | 6 | | | | | | |
| 6 | 25 | 62 | 7 | 18 | 0 | 0 | 1 | 2 | 1 | 2 | 2 | 5 | 7 | 8 | 9 | 9 | | | | | | |
| 7 | 3 | 62 | 8 | 6 | - | - | - | - | - | - | 10 | 6 | 20 | 7 | 30 | 9 | | | | | | |
| 7 | 16 | 62 | 8 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 10 | 5 | 11 | 7 | | | | | | |
| 7 | 23 | 62 | 8 | 21 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 7 | 6 | 5 | 6 | 8 | | | | | | |
| 7 | 30 | 62 | 8 | 22 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 7 | 7 | 5 | 7 | 9 | | | | | | |
| 8 | 6 | 62 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 12 | 6 | 13 | 7 | | | | | | |
| 8 | 13 | 62 | 8 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 9 | 6 | 9 | 7 | | | | | | |
| 8 | 20 | 62 | 9 | 7 | 0 | 0 | 1 | 1 | 1 | 1 | 12 | 6 | 11 | 8 | 23 | 10 | | | | | | |
| 8 | 28 | 62 | 9 | 18 | 0 | 0 | 1 | 1 | 1 | 1 | 4 | 4 | 11 | 6 | 15 | 7 | | | | | | |
| 9 | 3 | 62 | 9 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 5 | 21 | 6 | 28 | 7 | | | | | | |
| 9 | 17 | 62 | 10 | 16 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 5 | 5 | 5 | 5 | 7 | | | | | | |
| 9 | 24 | 62 | 10 | 17 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 7 | 14 | 7 | 15 | 10 | | | | | | |

**STATION LOCATION** COLUMBIA RIVER AT
NORTHPORT, WASHINGTON

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text* | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 5 | 17 | 62 | 1800 | 0 | 0 | 40 | 0 | 110 | 0 | 650 | 1030 | 420 | 300 | 71 | 2 | 92 | 1 | | | | | | | | | | | | |
| 5 | 28 | 62 | 1400 | 0 | 0 | 0 | 0 | 40 | 60 | 250 | 1030 | 250 | 340 | 92 | 2 | 93 | 1 | | | | | | | | | | | | |
| 6 | 11 | 62 | 1300 | 0 | 0 | 20 | 20 | 170 | 20 | 190 | 930 | 20 | 60 | 92 | 1 | 77 | 1 | 93 | 1 | 57 | 1 | | | | | | | | |
| 6 | 25 | 62 | 2200 | 0 | 40 | 20 | 0 | 60 | 40 | 1650 | 420 | 170 | 380 | 71 | 3 | 68 | 2 | 93 | 2 | 89 | 1 | | | | | | | | |
| 7 | 9 | 62 | 700 | 0 | 0 | 0 | 0 | 0 | 0 | 290 | 370 | 0 | 120 | 68 | 1 | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 250 | 0 | 110 | | | | | | | | | | | | | | | | |
| 8 | 2 | 62 | 600 | 0 | 130 | 80 | 0 | 0 | 60 | 210 | 80 | 0 | 210 | 68 | 1 | | | | | | | | | | | | | | |
| 8 | 14 | 62 | 200 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 80 | 40 | 0 | | | | | | | | | | | | | | | | |
| 8 | 28 | 62 | 1100 | 40 | 340 | 40 | 0 | 40 | 0 | 420 | 210 | 80 | 80 | 71 | 1 | 11 | 1 | 16 | 1 | 68 | 1 | | | | | | | | |
| 9 | 12 | 62 | 600 | 0 | 0 | 80 | 0 | 40 | 0 | 250 | 210 | 170 | 460 | | | | | | | | | | | | | | | | |
| 9 | 26 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 130 | 170 | 80 | | | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** WASHINGTON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** COLUMBIA RIVER ABOVE YAKIMA RIVER
**STATION LOCATION** COLUMBIA RIVER AT
NORTHPORT, WASHINGTON 112

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 5 | 17 | 62 | 95 | 25 | 92 | 13 | 82 | 8 | 45 | 8 | 40 | 210 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 28 | 62 | 95 | 33 | 92 | 17 | 47 | 6 | 46 | 6 | 38 | 0 | 0 | 4 | | | | | | | | | | | 4 | 50 | 1 | | | | | 0 | 0 |
| 6 | 11 | 62 | 95 | 60 | 47 | 8 | 45 | 8 | 92 | 7 | 17 | 0 | 0 | 6 | | | | | | | | | | | 5 | 50 | 1 | | | | | 0 | 0 |
| 6 | 25 | 62 | 95 | 62 | 82 | 17 | 45 | 3 | 61 | 3 | 15 | 20 | 0 | 3 | | | | | | | | | | | 4 | | | | | | | 0 | 0 |
| 7 | 9 | 62 | 27 | 46 | 95 | 21 | 28 | 13 | 47 | 5 | 15 | 0 | 0 | 2 | | | | | | | | | | | 8 | 50 | 2 | | | | | - | - |
| 7 | 16 | 62 | 30 | 32 | 27 | 32 | 95 | 27 | 47 | 6 | 3 | 0 | 0 | 2 | | | | | | | | | | | 4 | 50 | 1 | | | | | 0 | 0 |
| 8 | 2 | 62 | 30 | 49 | 27 | 25 | 47 | 8 | 9 | 3 | 15 | 0 | 0 | 39 | 17 | 3 | 11 | 1 | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 8 | 14 | 62 | 82 | 42 | 30 | 17 | 2 | 10 | 47 | 4 | 27 | 0 | 0 | 39 | 17 | 3 | 21 | 1 | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 8 | 28 | 62 | 47 | 60 | 95 | 4 | 58 | 4 | 2 | 4 | 28 | 0 | 0 | 15 | 11 | 1 | 17 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 12 | 62 | 47 | 30 | 58 | 22 | 26 | 8 | 57 | 4 | 36 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 26 | 62 | 56 | 48 | 47 | 26 | 71 | 10 | 58 | 4 | 12 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** WASHINGTON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** COLUMBIA RIVER ABOVE YAKIMA RIVER
**STATION LOCATION** COLUMBIA RIVER AT
NORTHPORT, WASHINGTON 112

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 8 | 22 | 62 | 8 | 31 | 5082 | 60 | 24 | 36 | 0 | 3 | 16 | 2 | 2 | 11 | 1 | 2 | 1 | 1 | 1 |

**MINOR BASIN** COLUMBIA RIVER ABOVE YAKIMA RIVER

**STATION LOCATION** COLUMBIA RIVER AT
NORTHPORT, WASHINGTON 112

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 23 | 62 | - | - | 8.1 | - | - | - | - | - | 3 | 96 | 68 | 0 | *25 | 13 | .0 | - | - |
| 8 | 6 | 62 | - | - | 8.0 | - | - | - | - | - | 2 | 52 | 64 | 0 | *25 | 10 | - | 93 | - |
| 8 | 20 | 62 | - | - | - | - | - | - | - | - | 14 | 56 | 64 | 5 | 25 | 17 | - | - | - |
| 9 | 12 | 62 | - | - | - | - | 52 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | 3 | 56 | 72 | 5 | *25 | 16 | .1 | 95 | - |
| 9 | 24 | 62 | - | - | - | - | - | - | - | - | 2 | 60 | 64 | 5 | *25 | 15 | .1 | 75 | - |

## STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at International Boundary, Washington
Operated by U.S. Geological Survey

STATE Washington
MAJOR BASIN Pacific Northwest
MINOR BASIN Columbia River above Yakima River
STATION LOCATION Columbia River at
Northport, Washington

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 48.000 | 53.000 | 50.000 | 38.000 | 40.000 | 42.000 | 42.000 | 135.000 | 270.000 | 268.000 | 153.000 | 82.000 |
| 2 | 46.000 | 51.000 | 44.000 | 36.000 | 42.000 | 42.000 | 39.000 | 136.000 | 272.000 | 267.000 | 152.000 | 76.000 |
| 3 | 44.000 | 47.000 | 37.000 | 35.000 | 43.000 | 43.000 | 37.000 | 137.000 | 277.000 | 260.000 | 151.000 | 74.000 |
| 4 | 44.000 | 46.000 | 31.000 | 32.000 | 46.000 | 41.000 | 41.000 | 137.000 | 276.000 | 252.000 | 154.000 | 72.000 |
| 5 | 48.000 | 47.000 | 33.000 | 34.000 | 41.000 | 45.000 | 45.000 | 137.000 | 273.000 | 243.000 | 146.000 | 72.000 |
| 6 | 52.000 | 47.000 | 33.000 | 36.000 | 53.000 | 50.000 | 49.000 | 136.000 | 271.000 | 235.000 | 145.000 | 71.000 |
| 7 | 52.000 | 43.000 | 34.000 | 33.000 | 52.000 | 48.000 | 53.000 | 137.000 | 267.000 | 226.000 | 144.000 | 71.000 |
| 8 | 46.000 | 46.000 | 36.000 | 34.000 | 53.000 | 48.000 | 55.000 | 139.000 | 260.000 | 218.000 | 145.000 | 67.000 |
| 9 | 45.000 | 47.000 | 39.000 | 35.000 | 51.000 | 47.000 | 55.000 | 138.000 | 259.000 | 213.000 | 144.000 | 66.000 |
| 10 | 48.000 | 46.000 | 40.000 | 35.000 | 51.000 | 50.000 | 57.000 | 135.000 | 258.000 | 209.000 | 137.000 | 65.000 |
| 11 | 56.000 | 48.000 | 37.000 | 38.000 | 50.000 | 47.000 | 60.000 | 133.000 | 256.000 | 202.000 | 132.000 | 65.000 |
| 12 | 60.000 | 51.000 | 40.000 | 37.000 | 46.000 | 46.000 | 61.000 | 133.000 | 250.000 | 199.000 | 129.000 | 63.000 |
| 13 | 65.000 | 51.000 | 40.000 | 34.000 | 45.000 | 40.000 | 62.000 | 134.000 | 245.000 | 197.000 | 127.000 | 62.000 |
| 14 | 55.000 | 56.000 | 35.000 | 34.000 | 46.000 | 38.000 | 62.000 | 135.000 | 244.000 | 194.000 | 123.000 | 63.000 |
| 15 | 47.000 | 62.000 | 31.000 | 32.000 | 47.000 | 38.000 | 65.000 | 135.000 | 244.000 | 192.000 | 119.000 | 62.000 |
| 16 | 50.000 | 56.000 | 33.000 | 34.000 | 49.000 | 41.000 | 73.000 | 133.000 | 238.000 | 188.000 | 117.000 | 58.000 |
| 17 | 59.000 | 55.000 | 33.000 | 40.000 | 49.000 | 42.000 | 84.000 | 134.000 | 236.000 | 188.000 | 115.000 | 58.000 |
| 18 | 75.000 | 53.000 | 33.000 | 36.000 | 48.000 | 43.000 | 84.000 | 138.000 | 242.000 | 187.000 | 114.000 | 54.000 |
| 19 | 80.000 | 53.000 | 33.000 | 36.000 | 46.000 | 44.000 | 87.000 | 145.000 | 251.000 | 179.000 | 112.000 | 53.000 |
| 20 | 62.000 | 51.000 | 36.000 | 36.000 | 44.000 | 47.000 | 93.000 | 154.000 | 254.000 | 174.000 | 109.000 | 58.000 |
| 21 | 61.000 | 52.000 | 38.000 | 37.000 | 45.000 | 45.000 | 98.000 | 159.000 | 257.000 | 168.000 | 109.000 | 59.000 |
| 22 | 64.000 | 53.000 | 38.000 | 37.000 | 47.000 | 37.000 | 100.000 | 165.000 | 261.000 | 165.000 | 109.000 | 54.000 |
| 23 | 68.000 | 52.000 | 39.000 | 38.000 | 46.000 | 35.000 | 101.000 | 173.000 | 264.000 | 161.000 | 105.000 | 51.000 |
| 24 | 60.000 | 51.000 | 39.000 | 40.000 | 49.000 | 33.000 | 110.000 | 181.000 | 264.000 | 161.000 | 102.000 | 50.000 |
| 25 | 63.000 | 51.000 | 38.000 | 40.000 | 48.000 | 36.000 | 115.000 | 192.000 | 264.000 | 157.000 | 103.000 | 52.000 |
| 26 | 61.000 | 51.000 | 37.000 | 37.000 | 44.000 | 43.000 | 118.000 | 202.000 | 266.000 | 155.000 | 103.000 | 53.000 |
| 27 | 60.000 | 50.000 | 36.000 | 37.000 | 45.000 | 49.000 | 121.000 | 214.000 | 271.000 | 154.000 | 102.000 | 50.000 |
| 28 | 61.000 | 51.000 | 35.000 | 36.000 | 43.000 | 56.000 | 125.000 | 230.000 | 271.000 | 154.000 | 101.000 | 51.000 |
| 29 | 56.000 | 55.000 | 34.000 | 37.000 |  | 59.000 | 128.000 | 246.000 | 271.000 | 155.000 | 91.000 | 52.000 |
| 30 | 60.000 | 53.000 | 34.000 | 38.000 |  | 56.000 | 132.000 | 257.000 | 270.000 | 152.000 | 86.000 | 51.000 |
| 31 | 56.000 |  | 34.000 | 38.000 |  | 48.000 |  | 264.000 |  | 153.000 | 84.000 |  |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** NORTHEAST
**MINOR BASIN** CONNECTICUT RIVER
**STATION LOCATION** CONNECTICUT RIVER AT
ENFIELD DAM, CONNECTICUT 82

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | | | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 7 | 16 | 62 | 8 | 17 | 1 | 1 | 0 | 0 | 1 | 1 | 8 | 6 | 14 | 8 | 22 | 10 | | | | | | | | |
| 7 | 25 | 62 | 9 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 8 | 6 | 8 | 8 | | | | | | | | |
| 8 | 1 | 62 | 9 | 12 | 0 | 1 | 0 | 0 | 0 | 1 | 50 | 6 | 5 | 3 | 55 | 7 | | | | | | | | |
| 8 | 8 | 62 | 8 | 29 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 5 | 14 | 6 | 18 | 7 | | | | | | | | |
| 8 | 15 | 62 | 8 | 31 | 0 | 1 | 0 | 0 | 0 | 1 | 11 | 5 | 14 | 6 | 25 | 8 | | | | | | | | |
| 8 | 22 | 62 | 9 | 18 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 6 | 9 | 7 | 15 | 9 | | | | | | | | |
| 8 | 29 | 62 | 9 | 14 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 11 | 7 | 7 | 15 | 13 | | | | | | | | |
| 9 | 5 | 62 | 9 | 20 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 5 | 13 | 6 | 18 | 7 | | | | | | | | |
| 9 | 12 | 62 | 10 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 5 | 6 | 10 | 7 | 15 | 9 | | | | | | | | |
| 9 | 19 | 62 | 10 | 9 | 0 | 0 | 0 | 1 | 0 | 1 | 16 | 5 | 14 | 6 | 30 | 7 | | | | | | | | |
| 9 | 26 | 62 | 10 | 24 | 1 | 1 | 0 | 0 | 1 | 1 | 7 | 5 | 10 | 6 | 17 | 8 | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

| | |
|---|---|
| **STATE** | CONNECTICUT |
| **MAJOR BASIN** | NORTHEAST |
| **MINOR BASIN** | CONNECTICUT RIVER |
| **STATION LOCATION** | CONNECTICUT RIVER AT<br>ENFIELD DAM, CONNECTICUT |

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for* | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9T |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS |
| 7 | 16 | 62 | 7100 | 540 | 20 | 2670 | 0 | 2250 | 0 | 900 | 680 | 360 | 270 | 51 | 4 | 32 | 3 | 69 | 3 | 38 | 2 | 9 | 2 | 68 | 2 | 25 | 1 | 35 | 1 | 77 |
| 8 | 1 | 62 | 7900 | 270 | 120 | 2630 | 0 | 2220 | 100 | 870 | 1720 | 370 | 210 | 51 | 4 | 69 | 3 | 77 | 3 | 34 | 3 | 38 | 2 | 93 | 2 | 24 | 2 | 31 | 2 | 40 |
| 8 | 15 | 62 | 14700 | 1300 | 0 | 3380 | 0 | 3790 | 230 | 4430 | 1530 | 580 | 460 | 51 | 5 | 69 | 5 | 68 | 4 | 2 | 3 | 25 | 3 | 34 | 3 | 38 | 2 | 24 | 2 | 3 |
| 9 | 5 | 62 | 11200 | 330 | 60 | 2090 | 0 | 1700 | 250 | 5700 | 1080 | 750 | 540 | 69 | 5 | 68 | 4 | 51 | 4 | 38 | 2 | 71 | 2 | 34 | 2 | 77 | 2 | 73 | 1 | 63 |
| 9 | 19 | 62 | 2300 | 0 | 0 | 540 | 0 | 520 | 20 | 920 | 320 | 630 | 560 | 69 | 2 | 51 | 2 | 26 | 1 | 38 | 1 | | | | | | | | | |
| 9 | 26 | 62 | 22000 | 250 | 550 | 2070 | 0 | 2570 | 40 | 16080 | 460 | 1770 | 930 | 68 | 7 | 51 | 5 | 69 | 4 | 16 | 2 | 34 | 2 | 92 | 2 | 28 | 1 | 3 | 1 | 24 |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | PROTOZOA *(Identifiable)* *Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable)* *Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 7 | 16 | 62 | 56 | 38 | 47 | 29 | 9 | 11 | 95 | 10 | 12 | 180 | 10 | 2510 | 7 | 8 | 22 | 8 | 2 | 6 | 17 | 6 | 1 | 5 | 145 | 50 | 5 | 51 | 5 | 76 | 3 | 0 | 0 |
| 8 | 1 | 62 | 56 | 33 | 9 | 21 | 95 | 15 | 47 | 9 | 22 | 0 | 0 | 260 | 11 | 7 | 22 | 7 | 2 | 6 | 7 | 5 | 17 | 4 | 70 | 50 | 4 | 76 | 3 | 51 | 2 | 0 | 0 |
| 8 | 15 | 62 | 56 | 52 | 58 | 21 | 28 | 6 | 27 | 4 | 17 | 0 | 0 | 716 | 11 | 6 | 17 | 6 | 22 | 4 | 18 | 3 | 21 | 3 | 37 | 50 | 3 | 51 | 3 | 52 | 1 | 0 | 1 |
| 9 | 5 | 62 | 56 | 65 | 47 | 9 | 3 | 8 | 58 | 3 | 15 | 0 | 0 | 1540 | 2 | 8 | 11 | 7 | 22 | 6 | 17 | 5 | 15 | 2 | 45 | 51 | 4 | 50 | 2 | 76 | 2 | 3 | 2 |
| 9 | 19 | 62 | 56 | 57 | 58 | 24 | 57 | 6 | 47 | 5 | 8 | 0 | 0 | 689 | 11 | 7 | 17 | 5 | 22 | 4 | 2 | 3 | 21 | 2 | 67 | 51 | 4 | 52 | 3 | 50 | 3 | 0 | 1 |
| 9 | 26 | 62 | 56 | 68 | 23 | 9 | 27 | 5 | 58 | 4 | 14 | 0 | 0 | 861 | 11 | 7 | 17 | 5 | 21 | 4 | 22 | 3 | 2 | 3 | 18 | 50 | 3 | 76 | 2 | | | - | - |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** CONNECTICUT

**MAJOR BASIN** NORTHEAST

**MINOR BASIN** CONNECTICUT RIVER

**STATION LOCATION** CONNECTICUT RIVER AT
ENFIELD DAM, CONNECTICUT

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 8 | 9 | 62 | 9 | 5 | 5639 | 205 | 98 | 107 | 1 | 11 | 56 | 8 | 6 | 41 | 1 | 15 | 5 | 2 | 8 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 16 | 62 | 25.0 | 8.8 | 7.6 | 7.3 | 25 | 2.0 | 6.5 | .2 | 11 | 33 | 44 | - | - | 10 | .4 | 113 | - |
| 7 | 25 | 62 | 25.0 | 4.2 | 7.0 | 3.2 | 21 | 1.0 | 8.3 | .5 | 9 | 33 | 42 | - | - | 22 | .3 | 80 | - |
| 8 | 1 | 62 | 26.0 | 5.0 | 7.4 | 2.1 | 22 | .8 | 7.9 | .6 | 12 | 38 | 46 | 10 | *25 | 17 | .3 | 83 | - |
| 8 | 8 | 62 | 27.0 | 6.0 | 7.0 | 3.2 | 15 | 1.7 | 8.0 | .4 | 14 | 38 | 49 | - | - | 15 | .2 | 85 | - |
| 8 | 15 | 62 | 23.0 | 7.6 | 7.0 | 3.4 | 20 | 3.9 | 9.5 | .6 | 11 | 28 | 42 | - | - | 10 | .1 | 56 | - |
| 8 | 22 | 62 | 23.5 | 7.4 | 7.1 | 3.6 | 23 | 3.1 | 9.6 | .5 | 11 | 30 | 37 | - | - | 5 | .4 | 84 | - |
| 8 | 29 | 62 | 24.0 | 5.3 | 6.9 | 3.1 | 23 | 4.1 | 12.2 | .5 | 10 | 32 | 48 | 20 | 25 | 20 | .0 | 88 | - |
| 9 | 5 | 62 | 23.5 | 4.3 | 7.0 | 3.4 | 24 | 1.8 | 10.1 | .4 | 11 | 33 | 36 | - | - | 20 | .5 | 82 | - |
| 9 | 12 | 62 | 22.5 | 5.7 | 6.7 | 3.4 | 27 | 4.3 | 12.2 | .4 | 13 | 31 | 34 | - | - | 14 | .4 | 74 | - |
| 9 | 19 | 62 | 19.0 | 5.6 | 6.5 | 3.5 | 24 | 4.9 | 8.9 | .5 | 11 | 29 | 34 | - | - | 20 | .4 | 77 | - |
| 9 | 26 | 62 | 17.0 | 7.5 | 6.6 | 3.7 | 27 | 3.7 | 8.4 | .5 | 10 | 32 | 36 | - | - | 20 | .5 | 75 | - |

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Thompsonville, Connecticut
Operated by U.S. Geological Survey

MINOR BASIN Connecticut River

STATION LOCATION Connecticut River at
Enfield Dam, Connecticut

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.640 | 3.950 | 10.200 | 5.310 | 9.440 | 7.840 | 63.600 | 38.800 | 9.760 | 1.620 | 9.560 | 4.480 |
| 2 | 2.500 | 4.070 | 9.080 | 6.660 | 8.230 | 7.820 | 96.000 | 43.900 | 10.300 | 1.950 | 11.700 | 2.240 |
| 3 | 5.240 | 4.550 | 3.830 | 9.620 | 8.980 | 6.370 | 89.200 | 46.800 | 7.150 | 2.810 | 12.500 | 1.560 |
| 4 | 6.840 | 3.570 | 5.280 | 10.500 | 4.290 | 4.830 | 76.700 | 48.800 | 4.680 | 2.040 | 8.870 | 3.230 |
| 5 | 5.920 | 1.720 | 8.730 | 10.300 | 6.040 | 5.380 | 63.700 | 43.700 | 7.750 | 2.320 | 3.370 | 4.960 |
| 6 | 5.000 | 3.890 | 13.500 | 7.820 | 8.440 | 6.500 | 54.200 | 35.800 | 9.690 | 2.570 | 4.050 | 5.100 |
| 7 | 3.490 | 9.350 | 13.300 | 10.800 | 8.740 | 7.000 | 56.500 | 29.900 | 10.200 | 2.120 | 6.760 | 4.750 |
| 8 | 1.810 | 13.100 | 14.700 | 12.900 | 8.120 | 6.610 | 73.600 | 25.700 | 10.000 | 1.480 | 11.000 | 2.980 |
| 9 | 3.520 | 11.200 | 14.800 | 12.500 | 7.890 | 6.870 | 88.800 | 26.300 | 8.380 | 1.790 | 13.800 | 1.440 |
| 10 | 5.370 | 10.400 | 10.100 | 11.700 | 8.130 | 6.580 | 84.500 | 24.300 | 4.340 | 2.950 | 13.800 | 2.190 |
| 11 | 5.860 | 7.760 | 6.970 | 11.300 | 4.310 | 5.580 | 82.800 | 22.300 | 4.790 | 3.270 | 15.500 | 4.960 |
| 12 | 3.680 | 2.960 | 10.000 | 10.400 | 4.770 | 7.520 | 80.500 | 17.900 | 7.730 | 2.600 | 13.300 | 5.900 |
| 13 | 3.580 | 4.600 | 11.800 | 7.930 | 6.700 | 14.300 | 73.100 | 13.900 | 8.700 | 2.790 | 5.660 | 5.460 |
| 14 | 4.000 | 7.140 | 13.200 | 6.450 | 7.100 | 13.300 | 63.200 | 10.900 | 6.980 | 1.440 | 8.120 | 5.980 |
| 15 | 3.830 | 8.080 | 13.900 | 6.540 | 7.390 | 11.700 | 54.500 | 14.600 | 6.730 | 1.130 | 8.300 | 3.140 |
| 16 | 4.400 | 8.580 | 10.600 | 12.900 | 6.870 | 11.900 | 47.200 | 18.900 | 3.820 | 1.980 | 9.030 | 1.300 |
| 17 | 6.330 | 9.010 | 4.800 | 15.300 | 5.970 | 12.800 | 40.800 | 18.300 | 1.600 | 4.300 | 11.000 | 2.920 |
| 18 | 6.140 | 8.560 | 5.190 | 15.300 | 3.830 | 11.400 | 35.500 | 16.800 | 2.980 | 5.950 | 8.310 | 5.600 |
| 19 | 6.100 | 3.730 | 9.910 | 13.400 | 5.000 | 10.100 | 28.500 | 15.200 | 4.680 | 5.010 | 3.290 | 6.960 |
| 20 | 7.120 | 5.010 | 11.800 | 12.700 | 6.640 | 12.500 | 25.700 | 15.400 | 5.110 | 4.060 | 4.280 | 5.760 |
| 21 | 5.340 | 9.820 | 11.300 | 10.300 | 6.710 | 13.800 | 28.000 | 14.600 | 4.650 | 3.730 | 7.600 | 5.480 |
| 22 | 2.040 | 9.410 | 10.200 | 8.120 | 6.240 | 12.800 | 28.400 | 15.600 | 4.650 | 2.160 | 9.100 | 3.390 |
| 23 | 3.250 | 7.460 | 9.550 | 11.000 | 6.690 | 12.900 | 30.400 | 18.600 | 3.310 | 2.790 | 9.380 | 1.570 |
| 24 | 5.190 | 7.630 | 5.010 | 10.400 | 5.420 | 13.300 | 33.300 | 19.000 | 2.030 | 5.110 | 8.120 | 2.750 |
| 25 | 5.090 | 13.400 | 3.850 | 10.900 | 4.350 | 12.500 | 38.200 | 18.200 | 3.210 | 5.510 | 3.890 | 4.890 |
| 26 | 4.960 | 11.000 | 5.780 | 10.500 | 4.100 | 14.900 | 35.100 | 20.500 | 4.850 | 5.260 | 1.750 | 5.530 |
| 27 | 4.300 | 8.470 | 11.200 | 11.800 | 7.700 | 17.300 | 31.100 | 19.600 | 5.580 | 5.370 | 3.460 | 6.390 |
| 28 | 2.660 | 9.960 | 13.100 | 9.260 | 8.540 | 19.800 | 25.500 | 18.300 | 4.250 | 3.640 | 5.370 | 8.500 |
| 29 | 1.640 | 10.600 | 12.800 | 7.940 |  | 22.600 | 26.900 | 15.800 | 4.360 | 1.350 | 6.380 | 9.000 |
| 30 | 2.080 | 10.400 | 11.000 | 9.740 |  | 30.100 | 30.800 | 12.300 | 3.170 | 3.900 | 6.220 | 3.110 |
| 31 | 4.000 |  | 8.730 | 11.100 |  | 45.000 |  | 11.400 |  | 6.260 | 5.460 |  |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Vernon, Vermont
Supplied by U.S. Geological Survey

MAJOR BASIN Northeast

MINOR BASIN Connecticut River

STATION LOCATION Connecticut River below
Northfield, Massachusetts

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .274 | 2.630 | 6.610 | 1.140 | 5.100 | 4.530 | 67.600 | 34.200 | 8.220 | .314 | 8.800 | 3.120 |
| 2 | 2.720 | 3.540 | 1.530 | 5.910 | 5.590 | 4.530 | 71.200 | 36.600 | 6.860 | 2.860 | 9.940 | 1.100 |
| 3 | 3.740 | 3.810 | .464 | 5.500 | 2.670 | 3.200 | 60.400 | 39.600 | 1.140 | 2.410 | 8.810 | 1.280 |
| 4 | 3.710 | .512 | 5.700 | 5.380 | 1.350 | 1.320 | 48.800 | 37.400 | 6.260 | .278 | 4.970 | 3.200 |
| 5 | 3.170 | .283 | 7.820 | 5.260 | 5.550 | 4.370 | 40.100 | 30.500 | 6.650 | 2.990 | .310 | 4.200 |
| 6 | 2.640 | 5.200 | 9.090 | 1.520 | 5.350 | 4.670 | 40.000 | 24.700 | 7.010 | 2.950 | 5.040 | 4.120 |
| 7 | .321 | 6.950 | 12.500 | 4.110 | 5.150 | 4.570 | 46.400 | 21.300 | 6.920 | .487 | 6.380 | 4.220 |
| 8 | .302 | 7.400 | 12.600 | 4.450 | 4.930 | 4.370 | 66.700 | 20.900 | 7.000 | .267 | 10.700 | .741 |
| 9 | 3.090 | 7.350 | 8.450 | 5.590 | 5.010 | 4.670 | 68.800 | 20.500 | 4.040 | 2.200 | 9.690 | .287 |
| 10 | 3.410 | 7.700 | 2.190 | 7.050 | 2.900 | 3.270 | 65.600 | 17.300 | 1.240 | 2.380 | 11.500 | 4.840 |
| 11 | 3.440 | 1.060 | 6.010 | 5.990 | 1.370 | 2.190 | 65.200 | 13.300 | 5.170 | 2.280 | 13.300 | 6.740 |
| 12 | .588 | .425 | 7.300 | 6.370 | 5.170 | 5.630 | 59.500 | 12.900 | 4.850 | 2.270 | 1.430 | 4.750 |
| 13 | 3.780 | 3.770 | 7.870 | 3.080 | 4.760 | 6.710 | 51.300 | 6.390 | 5.070 | 2.140 | 7.270 | 5.530 |
| 14 | .566 | 5.200 | 9.550 | 1.380 | 5.210 | 4.450 | 44.800 | 9.040 | 4.940 | .290 | 5.980 | 5.240 |
| 15 | .845 | 4,950 | 9.270 | 5.620 | 4.150 | 4.580 | 37.200 | 13.500 | 4.110 | .285 | 6.580 | .294 |
| 16 | 3.260 | 5.260 | 2.650 | 7.180 | 4.710 | 5.060 | 33.100 | 13.400 | .388 | 4.430 | 7.830 | .280 |
| 17 | 3.830 | 5.930 | .336 | 7.700 | 2.670 | 5.660 | 26.700 | 13.200 | .338 | 5.120 | 8.350 | 4.980 |
| 18 | 3.420 | 1.570 | 5.520 | 9.000 | 1.330 | 1.390 | 23.500 | 10.300 | 3.650 | 4.600 | 4.980 | 7.200 |
| 19 | 3.740 | .432 | 6.140 | 8.850 | 3.990 | 5.840 | 17.000 | 11.300 | 3.880 | 4.430 | 1.160 | 5.520 |
| 20 | 5.330 | 6.490 | 5.500 | 7.680 | 4.370 | 6.410 | 20.000 | 12.000 | 3.640 | 4.150 | 5.340 | 5.550 |
| 21 | .685 | 5.800 | 5.540 | 3.530 | 4.560 | 6.220 | 20.700 | 10.200 | 3.290 | 2.220 | 7.240 | 6.080 |
| 22 | .298 | 6.010 | 6.200 | 7.050 | 4.160 | 5.480 | 20.700 | 16.400 | 3.500 | .768 | 6.730 | 1.020 |
| 23 | 3.390 | 1.670 | 2.320 | 6.000 | 4.560 | 6.030 | 22.600 | 15.600 | 1.880 | 3.310 | 7.420 | .332 |
| 24 | 3.250 | 7.350 | 2.070 | 6.610 | 2.670 | 5.860 | 29.900 | 14.200 | .858 | 5.490 | 5.800 | 5.320 |
| 25 | 3.140 | 7.470 | 1.170 | 6.350 | .590 | 5.190 | 29.900 | 17.700 | 3.610 | 4.310 | 1.650 | 5.300 |
| 26 | 2.830 | 2.320 | 6.720 | 6.710 | 5.960 | 7.980 | 25.600 | 16.800 | 4.100 | 4.620 | .307 | 4.960 |
| 27 | 2.700 | 6.040 | 8.430 | 5.860 | 5.160 | 11.100 | 21.600 | 15.500 | 3.860 | 4.420 | 4.480 | 6.410 |
| 28 | .350 | 5.860 | 7.670 | 1.050 | 4.880 | 11.900 | 20.200 | 13.300 | 4.120 | .892 | 5.760 | 7.510 |
| 29 | .285 | 6.080 | 6.320 | 7.020 |  | 15.700 | 23.600 | 12.000 | 3.760 | .327 | 4.420 | 3.060 |
| 30 | 2.440 | 6.670 | 5.370 | 6.640 |  | 23.200 | 26.400 | 8.440 | .556 | 4.450 | 4.670 | .355 |
| 31 | 2.360 |  | 1.190 | 5.820 |  | 35.600 |  | 7.570 |  | 5.950 | 4.340 |  |

Computed as sum of Ashuelot River at Hinsdale, New Hampshire plus Connecticut River at Vernon, Vermont.

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

| | |
|---|---|
| **STATE** | MASSACHUSETTS |
| **MAJOR BASIN** | NORTHEAST |
| **MINOR BASIN** | CONNECTICUT RIVER |
| **STATION LOCATION** | CONNECTICUT RIVER BELOW<br>NORTHFIELD, MASSACHUSETTS |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BET |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g |
| 10 | 2 | 61 | 10 | 16 | - | - | - | - | - | - | 4 | 6 | 7 | 6 | 11 | 9 | | | | | |
| 10 | 9 | 61 | 10 | 26 | - | - | - | - | - | - | 7 | 5 | 3 | 5 | 10 | 7 | | | | | |
| 10 | 16 | 61 | 11 | 1 | - | - | - | - | - | - | 9 | 5 | 16 | 6 | 25 | 8 | | | | | |
| 10 | 23 | 61 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 6 | 4 | 8 | 6 | | | | | |
| 10 | 30 | 61 | 11 | 14 | - | - | - | - | - | - | 5 | 5 | 7 | 6 | 12 | 8 | | | | | |
| 11 | 6 | 61 | 11 | 21 | - | - | - | - | - | - | 3 | 5 | 17 | 6 | 20 | 8 | | | | | |
| 11 | 13 | 61 | 11 | 28 | - | - | - | - | - | - | 5 | 5 | 14 | 5 | 19 | 7 | | | | | |
| 11 | 20 | 61 | 12 | 4 | - | - | - | - | - | - | 3 | 5 | 13 | 6 | 16 | 8 | | | | | |
| 11 | 27 | 61 | 12 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 6 | 22 | 6 | 34 | 9 | | | | | |
| 12 | 4 | 61 | 12 | 18 | - | - | - | - | - | - | 6 | 6 | 9 | 6 | 15 | 9 | | | | | |
| 12 | 11 | 61 | 12 | 29 | - | - | - | - | - | - | 16 | 4 | 22 | 5 | 38 | 6 | | | | | |
| 12 | 18 | 61 | 12 | 29 | - | - | - | - | - | - | 5 | 5 | 14 | 6 | 19 | 8 | | | | | |
| 12 | 26 | 61 | 1 | 11 | 0 | 0 | 0 | 1 | 0 | 1 | 11 | 4 | 29 | 5 | 40 | 6 | | | | | |
| 1 | 2 | 62 | 1 | 15 | - | - | - | - | - | - | 16 | 4 | 20 | 5 | 36 | 7 | | | | | |
| 1 | 8 | 62 | 1 | 24 | - | - | - | - | - | - | 15 | 4 | 14 | 4 | 29 | 6 | | | | | |
| 1 | 15 | 62 | 1 | 29 | - | - | - | - | - | - | 3 | 6 | 24 | 7 | 27 | 9 | | | | | |
| 1 | 22 | 62 | 2 | 7 | 0 | 1 | 0 | 1 | 0 | 1 | 11 | 4 | 33 | 5 | 44 | 6 | | | | | |
| 1 | 29 | 62 | 2 | 13 | - | - | - | - | - | - | 12 | 6 | 23 | 6 | 35 | 8 | | | | | |
| 2 | 5 | 62 | 2 | 19 | - | - | - | - | - | - | 35 | 6 | 20 | 6 | 55 | 8 | | | | | |
| 2 | 12 | 62 | 2 | 27 | - | - | - | - | - | - | 7 | 4 | 10 | 4 | 17 | 5 | | | | | |
| 2 | 20 | 62 | 3 | 7 | - | - | - | - | - | - | 0 | 5 | 8 | 6 | 8 | 8 | | | | | |
| 2 | 26 | 62 | 3 | 9 | 0 | 0 | 0 | 1 | 0 | 1 | 19 | 4 | 26 | 5 | 45 | 6 | | | | | |
| 3 | 6 | 62 | 3 | 19 | - | - | - | - | - | - | 24 | 4 | 31 | 5 | 55 | 6 | | | | | |
| 3 | 13 | 62 | 3 | 26 | - | - | - | - | - | - | 28 | 6 | 24 | 6 | 52 | 8 | | | | | |
| 3 | 19 | 62 | 4 | 3 | - | - | - | - | - | - | 19 | 6 | 27 | 6 | 46 | 8 | | | | | |
| 3 | 26 | 62 | 4 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 4 | 23 | 5 | 30 | 6 | | | | | |
| 4 | 2 | 62 | 4 | 19 | - | - | - | - | - | - | 58 | 7 | 23 | 4 | 81 | 8 | | | | | |
| 4 | 9 | 62 | 4 | 26 | - | - | - | - | - | - | 24 | 7 | 21 | 6 | 45 | 9 | | | | | |
| 4 | 16 | 62 | 5 | 1 | - | - | - | - | - | - | 6 | 5 | 18 | 6 | 24 | 7 | | | | | |
| 4 | 23 | 62 | 7 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 6 | 7 | 9 | | | | | |
| 4 | 30 | 62 | 6 | 5 | - | - | - | - | - | - | 7 | 6 | 16 | 7 | 23 | 9 | | | | | |
| 5 | 7 | 62 | 7 | 18 | - | - | - | - | - | - | 7 | 5 | 8 | 5 | 15 | 7 | | | | | |
| 5 | 14 | 62 | 6 | 22 | - | - | - | - | - | - | 10 | 3 | 17 | 3 | 27 | 4 | | | | | |
| 5 | 21 | 62 | 6 | 27 | - | - | - | - | - | - | 1 | 6 | 9 | 6 | 10 | 8 | | | | | |
| 5 | 28 | 62 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 14 | 5 | 17 | 7 | | | | | |
| 6 | 4 | 62 | 7 | 5 | - | - | - | - | - | - | 2 | 5 | 7 | 7 | 9 | 9 | | | | | |
| 6 | 11 | 62 | 7 | 12 | - | - | - | - | - | - | 6 | 6 | 14 | 7 | 20 | 9 | | | | | |
| 6 | 18 | 62 | 7 | 17 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 5 | 2 | 6 | 3 | 7 | | | | | |
| 6 | 25 | 62 | 7 | 25 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 5 | 14 | 6 | 22 | 7 | | | | | |
| 7 | 3 | 62 | 8 | 3 | - | - | - | - | - | - | 3 | 3 | 11 | 3 | 14 | 4 | | | | | |
| 7 | 9 | 62 | 10 | 1 | - | - | - | - | - | - | 3 | 6 | 8 | 6 | 11 | 8 | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

| | |
|---|---|
| **STATE** | MASSACHUSETTS |
| **MAJOR BASIN** | NORTHEAST |
| **MINOR BASIN** | CONNECTICUT RIVER |
| **STATION LOCATION** | CONNECTICUT RIVER BELOW<br>NORTHFIELD, MASSACHUSETTS 11 |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 7 | 16 | 62 | 8 | 2 | – | – | – | – | – | – | 5 | 5 | 16 | 6 | 21 | 7 | | | | | | |
| 7 | 23 | 62 | 8 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 14 | 6 | 19 | 7 | | | | | | |
| 7 | 30 | 62 | 8 | 17 | – | – | – | – | – | – | 6 | 5 | 13 | 6 | 19 | 7 | | | | | | |
| 8 | 6 | 62 | 8 | 23 | – | – | – | – | – | – | 1 | 5 | 11 | 6 | 12 | 7 | | | | | | |
| 8 | 13 | 62 | 8 | 29 | – | – | – | – | – | – | 7 | 5 | 13 | 5 | 20 | 7 | | | | | | |
| 8 | 20 | 62 | 9 | 10 | – | – | – | – | – | – | 3 | 5 | 14 | 5 | 17 | 7 | | | | | | |
| 9 | 4 | 62 | 10 | 1 | – | – | – | – | – | – | 8 | 6 | 12 | 7 | 20 | 9 | | | | | | |
| 9 | 10 | 62 | 10 | 13 | – | – | – | – | – | – | 5 | 5 | 17 | 6 | 22 | 7 | | | | | | |
| 9 | 17 | 62 | 10 | 16 | – | – | – | – | – | – | 1 | 5 | 12 | 6 | 13 | 7 | | | | | | |
| 9 | 24 | 62 | 10 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 3 | 14 | 3 | 18 | 4 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** MASSACHUSETTS
**MAJOR BASIN** NORTHEAST
**MINOR BASIN** CONNECTICUT RIVER
**STATION LOCATION** CONNECTICUT RIVER BELOW
NORTHFIELD, MASSACHUSETTS 11

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 8400 | 100 | 930 | 790 | 0 | 150 | 0 | 5760 | 660 | 2090 | 290 | 71 | 8 | 69 | 4 | 16 | 3 | 68 | 3 | 77 | 2 | 38 | 1 | 25 | 1 | | | | | | |
| 10 | 16 | 61 | 4100 | 0 | 80 | 710 | 0 | 460 | 20 | 2670 | 210 | 810 | 150 | 69 | 3 | 68 | 3 | 71 | 2 | 38 | 1 | | | | | | | | | | | | |
| 11 | 6 | 61 | 1400 | 0 | 0 | 50 | 0 | 110 | 0 | 1070 | 130 | 270 | 130 | 71 | 2 | 68 | 2 | 69 | 1 | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 700 | 0 | 20 | 0 | 0 | 0 | 0 | 660 | 60 | 0 | 100 | 71 | 1 | 68 | 1 | 69 | 1 | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 100 | 0 | 0 | 0 | 0 | 20 | 0 | 50 | 70 | 50 | 50 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 1500 | 0 | 0 | 0 | 0 | 20 | 0 | 600 | 910 | 60 | 250 | 69 | 2 | 92 | 1 | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 900 | 0 | 0 | 20 | 0 | 70 | 0 | 230 | 560 | 20 | 50 | 82 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 2 | 20 | 62 | 100 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 90 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 3 | 6 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 150 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 300 | 0 | 0 | 20 | 0 | 0 | 0 | 40 | 230 | 40 | 80 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 3000 | 20 | 20 | 0 | 0 | 40 | 20 | 370 | 2570 | 60 | 640 | 92 | 2 | 82 | 2 | 69 | 2 | 88 | 1 | 82 | 1 | 84 | 1 | | | | | | | | |
| 4 | 16 | 62 | 200 | 0 | 0 | 40 | 0 | 0 | 0 | 20 | 130 | 20 | 60 | | | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 600 | 0 | 0 | 20 | 0 | 40 | 0 | 100 | 390 | 0 | 100 | | | | | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 4400 | 0 | 20 | 130 | 20 | 2980 | 60 | 510 | 700 | 20 | 300 | 51 | 5 | 68 | 2 | 92 | 1 | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 3600 | 210 | 190 | 770 | 0 | 460 | 80 | 850 | 1040 | 100 | 100 | 92 | 2 | 68 | 2 | 51 | 2 | 69 | 2 | 25 | 1 | 3 | 1 | 16 | 1 | | | | | | |
| 6 | 18 | 62 | 6900 | 930 | 440 | 1010 | 0 | 2070 | 190 | 1510 | 790 | 40 | 170 | 51 | 4 | 68 | 3 | 69 | 2 | 25 | 2 | 16 | 2 | 92 | 2 | 4 | 2 | 3 | 2 | 38 | 1 | 9 | 1 |
| 7 | 2 | 62 | 28900 | 18150 | 1900 | 2740 | 0 | 250 | 0 | 2570 | 3250 | 460 | 680 | 4 | 7 | 77 | 4 | 17 | 4 | 68 | 4 | 38 | 3 | 69 | 3 | 24 | 2 | 45 | 2 | 93 | 2 | | |
| 7 | 16 | 62 | 4600 | 490 | 0 | 2590 | 0 | 250 | 0 | 250 | 1040 | 290 | 290 | 32 | 3 | 25 | 2 | 93 | 2 | 77 | 2 | 38 | 2 | 26 | 1 | 3 | 1 | 51 | 1 | 2 | 1 | 40 | 1 |
| 8 | 6 | 62 | 5900 | 290 | 0 | 1260 | 0 | 1180 | 290 | 2030 | 870 | 120 | 80 | 69 | 4 | 51 | 3 | 68 | 3 | 25 | 2 | 92 | 1 | 3 | 1 | 38 | 1 | 34 | 1 | 77 | 1 | 87 | 1 |
| 8 | 20 | 62 | 4000 | 150 | 0 | 770 | 0 | 1080 | 460 | 1140 | 460 | 120 | 80 | 51 | 3 | 68 | 2 | 62 | 2 | 69 | 2 | | | | | | | | | | | | |
| 8 | 28 | 62 | 3600 | 0 | 0 | 540 | 40 | 1040 | 250 | 1160 | 620 | 330 | 290 | 51 | 3 | 69 | 2 | 68 | 2 | 77 | 1 | 60 | 1 | 38 | 1 | 92 | 1 | | | | | | |
| 9 | 17 | 62 | 4400 | 170 | 0 | 700 | 0 | 1330 | 120 | 1100 | 990 | 250 | 250 | 51 | 3 | 88 | 3 | 69 | 2 | 68 | 2 | 38 | 1 | 57 | 1 | 3 | 1 | 77 | 1 | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (*See text for Codes*) | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (*Identifiable*) *Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (*Identifiable*) *Number per liter* | OTHER ANIMAL FORMS (*Number per liter*) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (*See text for Codes*) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (*See text for Codes*) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 56 | 35 | 82 | 33 | 58 | 13 | 9 | 7 | 12 | 0 | 0 | 19 | 17 | 2 | | | | | | | | | 81 | 54 | 4 | 98 | 3 | 76 | 3 | 0 | 4 |
| 10 | 16 | 61 | 56 | 39 | 58 | 29 | 82 | 10 | 23 | 8 | 14 | 0 | 0 | 578 | 11 | 7 | 17 | 6 | 21 | 1 | 46 | 1 | | | 14 | 54 | 2 | 76 | 1 | | | 0 | 0 |
| 11 | 6 | 61 | 56 | 74 | 58 | 8 | 82 | 5 | 47 | 3 | 10 | 0 | 10 | 108 | 11 | 5 | 17 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 56 | 32 | 58 | 17 | 9 | 12 | 2 | 7 | 32 | 0 | 0 | 12 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 2 | 23 | 56 | 15 | 92 | 5 | 58 | 5 | 52 | 0 | 0 | 8 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 92 | 20 | 56 | 18 | 36 | 8 | 45 | 5 | 49 | 0 | 10 | 11 | | | | | | | | | | | 2 | | | | | | | 3 | 0 |
| 1 | 2 | 62 | 36 | 10 | 92 | 10 | 58 | 9 | 56 | 9 | 62 | 70 | 0 | 7 | 11 | 1 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 56 | 14 | 2 | 10 | 92 | 9 | 58 | 7 | 60 | 60 | 10 | 15 | 11 | 2 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 58 | 15 | 92 | 10 | 2 | 7 | 93 | 6 | 62 | 20 | 0 | 8 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 20 | 62 | | | | | | | | | | 0 | 0 | 6 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 6 | 62 | 92 | 25 | 14 | 17 | 31 | 7 | 56 | 6 | 45 | 0 | 0 | 16 | 11 | 2 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 92 | 10 | 56 | 10 | 2 | 9 | 45 | 6 | 65 | 0 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 92 | 28 | 56 | 20 | 62 | 7 | 36 | 6 | 39 | 40 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 4 | 16 | 62 | 2 | 26 | 92 | 10 | 56 | 8 | 31 | 5 | 51 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 5 | 7 | 62 | 92 | 12 | 14 | 10 | 2 | 9 | 56 | 7 | 62 | 20 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 92 | 28 | 2 | 14 | 14 | 12 | 56 | 7 | 39 | 110 | 0 | 13 | 46 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 92 | 26 | 56 | 24 | 95 | 12 | 2 | 5 | 33 | 120 | 0 | 121 | 11 | 4 | 21 | 3 | 17 | 2 | 46 | 2 | 15 | 1 | 9 | 50 | 2 | 76 | 1 | | | 3 | 0 |
| 6 | 18 | 62 | 56 | 45 | 95 | 17 | 47 | 11 | 92 | 11 | 16 | 0 | 0 | 623 | 11 | 7 | 17 | 4 | 1 | 3 | 46 | 3 | 22 | 1 | 32 | 76 | 2 | 50 | 2 | | | 2 | 0 |
| 7 | 2 | 62 | 56 | 56 | 95 | 17 | 9 | 15 | 47 | 7 | 5 | 0 | 0 | 121 | 17 | 4 | 22 | 4 | 11 | 3 | 5 | 1 | | | 66 | 76 | 4 | 51 | 3 | 50 | 3 | 0 | 1 |
| 7 | 16 | 62 | 95 | 37 | 56 | 22 | 47 | 21 | 9 | 15 | 5 | 0 | 0 | 45 | 11 | 3 | 22 | 1 | | | | | | | 34 | 50 | 3 | 76 | 2 | | | 0 | 0 |
| 8 | 6 | 62 | 56 | 46 | 58 | 32 | 92 | 4 | 28 | 3 | 15 | 0 | 0 | 727 | 11 | 6 | 17 | 6 | 21 | 4 | 22 | 3 | 1 | 1 | 23 | 50 | 2 | 51 | 2 | | | 0 | 0 |
| 8 | 20 | 62 | 56 | 72 | 57 | 4 | 92 | 3 | 26 | 2 | 19 | 0 | 0 | 192 | 11 | 5 | 17 | 3 | 21 | 3 | 22 | 2 | 15 | 1 | 7 | 50 | 1 | 51 | 1 | | | 0 | 0 |
| 8 | 28 | 62 | 56 | 50 | 27 | 7 | 92 | 5 | 58 | 5 | 33 | 0 | 0 | 582 | 11 | 6 | 22 | 5 | 21 | 5 | 17 | 5 | 16 | 2 | 16 | 50 | 2 | 51 | 1 | 76 | 1 | 0 | 3 |
| 9 | 17 | 62 | 56 | 41 | 70 | 6 | 28 | 5 | 26 | 2 | 46 | 0 | 10 | 532 | 11 | 6 | 17 | 6 | 22 | 3 | 21 | 1 | 18 | 1 | 30 | 73 | 3 | 50 | 2 | 53 | 1 | 0 | 1 |

**MINOR BASIN** CONNECTICUT RIVER

**STATION LOCATION** CONNECTICUT RIVER BELOW

NORTHFIELD, MASSACHUSETTS 11

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 19.2 | 9.7 | 7.5 | 3.4 | 24 | 2.6 | 7.6 | .0 | 7 | 42 | 48 | 22 | 9 | 9 | .0 | 85 | 3700 |
| 10 | 9 | 61 | 18.8 | 9.0 | 7.4 | 2.7 | 25 | 3.4 | 9.9 | .0 | 9 | 32 | 40 | 25 | 4 | 13 | .1 | 75 | 1000 |
| 10 | 16 | 61 | 14.0 | 7.6 | 7.1 | 2.0 | 23 | 2.9 | 9.0 | .0 | 15 | 18 | 34 | 25 | 8 | 8 | .0 | 85 | 22000 |
| 10 | 23 | 61 | 12.6 | 8.4 | 7.2 | 3.6 | 26 | 3.4 | 8.1 | .0 | 15 | 34 | 42 | 22 | 12 | 15 | .0 | 97 | 7000 |
| 10 | 30 | 61 | 12.2 | 9.2 | 7.1 | 2.6 | 22 | 4.5 | 10.4 | .0 | 8 | 36 | 44 | 27 | 6 | 13 | .1 | 80 | 1400 |
| 11 | 6 | 61 | 13.2 | 8.1 | 7.2 | 2.9 | 22 | 3.3 | 8.8 | .0 | 16 | 36 | 42 | 27 | 5 | 8 | .0 | 99 | 3700 |
| 11 | 13 | 61 | 7.6 | 9.8 | 6.9 | 3.3 | 24 | 3.1 | 9.3 | .0 | 12 | 26 | 34 | 27 | 8 | 10 | .2 | 82 | 32000 |
| 11 | 20 | 61 | 6.0 | 10.5 | 6.7 | 2.1 | 24 | 2.4 | 8.8 | .1 | 7 | 26 | 42 | 27 | 2 | 21 | .3 | 99 | 920 |
| 11 | 27 | 61 | 5.2 | 11.5 | 7.4 | 3.0 | 23 | 4.1 | 9.0 | .1 | 7 | 24 | 32 | 26 | 7 | 8 | .3 | 64 | 4800 |
| 12 | 4 | 61 | 3.0 | 10.7 | 7.1 | 1.7 | 23 | 3.1 | 9.0 | .1 | 7 | 28 | 38 | 26 | 7 | 7 | .2 | 81 | 3700 |
| 12 | 11 | 61 | 2.8 | 11.8 | 7.2 | 2.0 | 25 | 1.0 | 10.5 | .2 | 5 | 30 | 36 | 32 | 4 | 12 | .1 | 76 | 1700 |
| 12 | 18 | 61 | 1.0 | 11.7 | 7.0 | 3.6 | 29 | 1.0 | 11.3 | .2 | 6 | 30 | 36 | 27 | 7 | 10 | .1 | 79 | 2900 |
| 12 | 26 | 61 | 1.0 | 11.8 | 7.0 | 2.1 | 25 | 1.0 | 11.6 | .3 | 7 | 26 | 34 | 28 | 4 | 10 | .1 | 78 | 2300 |
| 1 | 2 | 62 | .4 | 12.0 | 7.0 | 1.6 | 23 | 1.0 | 11.7 | .2 | 9 | 30 | 38 | 26 | 1 | 11 | .2 | 77 | 2900 |
| 1 | 8 | 62 | 1.0 | 11.4 | 7.0 | 2.2 | 26 | 2.5 | 12.9 | .3 | 6 | 28 | 36 | 30 | 4 | 12 | .2 | 84 | 3800 |
| 1 | 15 | 62 | .8 | 11.6 | 6.9 | 2.0 | 24 | 1.3 | 12.9 | .3 | 7 | 28 | 32 | 30 | 4 | 15 | .3 | 81 | 4100 |
| 1 | 22 | 62 | 1.0 | 12.0 | 6.8 | 1.9 | 23 | 1.2 | 11.5 | .2 | 7 | 26 | 38 | 24 | 4 | 11 | .2 | 72 | 3700 |
| 1 | 29 | 62 | .2 | 12.4 | 7.1 | 2.0 | 20 | 1.2 | 10.4 | .2 | 8 | 24 | 36 | 26 | 3 | 10 | .2 | 85 | 3100 |
| 2 | 5 | 62 | 1.0 | 11.6 | 6.8 | 2.8 | 22 | 1.2 | 10.4 | .2 | 10 | 24 | 38 | 25 | 6 | 14 | .1 | 96 | 910 |
| 2 | 12 | 62 | .2 | 11.5 | 6.9 | 1.4 | 22 | 1.2 | 10.4 | .2 | 7 | 26 | 36 | 25 | 2 | 11 | .1 | 82 | 1900 |
| 2 | 20 | 62 | .8 | 10.7 | 6.8 | 1.3 | 24 | 1.0 | 11.3 | .3 | 6 | 28 | 36 | 30 | 3 | 14 | .2 | 80 | 5000 |
| 2 | 26 | 62 | .9 | 11.4 | 6.8 | 2.9 | 24 | 1.2 | 11.6 | .2 | 11 | 24 | 34 | 30 | 6 | 11 | .2 | 98 | 5700 |
| 3 | 6 | 62 | .2 | 10.7 | 6.8 | 2.1 | 27 | 5.1 | 10.4 | .2 | 9 | 28 | 36 | 24 | 7 | 9 | .1 | 75 | 6000 |
| 3 | 13 | 62 | 1.0 | 10.5 | 6.8 | .8 | 19 | 4.9 | 9.7 | .3 | 7 | 30 | 38 | 24 | 5 | 11 | .1 | 74 | 2600 |
| 3 | 19 | 62 | 1.2 | 10.9 | 6.8 | 3.1 | 21 | 4.6 | 10.1 | .2 | 11 | 24 | 36 | 23 | 10 | 21 | .2 | 86 | 2000 |
| 3 | 26 | 62 | 1.1 | 11.8 | 7.0 | 1.7 | 20 | 1.2 | 10.3 | .2 | 8 | 24 | 32 | 23 | 7 | 9 | .1 | 83 | 2300 |
| 4 | 2 | 62 | 1.8 | 14.6 | 7.0 | 3.7 | 35 | 4.4 | 11.1 | .2 | 4 | 18 | 22 | 32 | 31 | 10 | .1 | 69 | 1900 |
| 4 | 9 | 62 | 5.0 | 13.5 | 7.0 | 2.1 | 22 | 5.1 | 11.8 | .2 | 3 | 16 | 22 | 27 | 28 | 9 | .1 | 48 | 2600 |
| 4 | 16 | 62 | 4.5 | 13.3 | 7.0 | 1.1 | 20 | 2.9 | 10.3 | .1 | 4 | 18 | 26 | 24 | 24 | 8 | .1 | 56 | 1600 |
| 4 | 23 | 62 | 8.5 | 11.7 | 7.1 | 1.6 | 14 | 2.4 | 7.2 | .0 | 3 | 22 | 26 | 23 | 6 | 6 | .1 | 53 | 1000 |
| 4 | 30 | 62 | 10.8 | 11.0 | 7.1 | 1.3 | 16 | 3.5 | 9.4 | .0 | 3 | 20 | 24 | 24 | 4 | 5 | .1 | 56 | 2700 |
| 5 | 7 | 62 | 9.0 | 11.5 | 7.3 | .8 | 18 | 3.1 | 8.7 | .1 | 3 | 18 | 24 | 27 | 2 | 5 | .1 | 50 | 2600 |
| 5 | 14 | 62 | 10.2 | 9.9 | 7.2 | 1.4 | 37 | 2.8 | 7.3 | .0 | 5 | 18 | 24 | 23 | 3 | 17 | .1 | 40 | 1400 |
| 5 | 21 | 62 | 18.0 | 9.5 | 7.2 | 2.9 | 14 | 2.0 | 6.1 | .0 | 5 | 20 | 28 | 22 | 3 | 10 | .1 | 53 | 2700 |
| 5 | 28 | 62 | 16.0 | 8.9 | 7.3 | 1.2 | 16 | 3.4 | 7.5 | .0 | 4 | 20 | 30 | 24 | 4 | 6 | .1 | 60 | 2000 |
| 6 | 4 | 62 | 19.6 | 8.9 | 7.2 | 1.9 | 16 | 2.7 | 6.8 | .0 | 7 | 24 | 32 | 23 | 4 | 12 | .1 | 76 | 3700 |
| 6 | 11 | 62 | 21.4 | 8.6 | 7.3 | 2.7 | 14 | 2.5 | 7.1 | .0 | 9 | 30 | 34 | 19 | 6 | 10 | .1 | 72 | 3800 |
| 6 | 18 | 62 | 24.8 | 8.6 | 7.2 | 1.8 | 17 | 2.7 | 9.4 | .0 | 9 | 28 | 36 | 18 | 4 | 10 | .1 | 70 | 1800 |
| 6 | 25 | 62 | 22.4 | 8.0 | 7.3 | 2.9 | 16 | 2.7 | 6.6 | .0 | 16 | 32 | 38 | 17 | 4 | 8 | .1 | 82 | 3000 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 2 | 62 | 24.0 | 8.9 | 7.3 | 2.5 | 21 | 1.9 | 7.1 | .0 | 19 | 30 | 38 | 18 | 14 | 10 | .1 | 95 | 280 |
| 7 | 9 | 62 | 24.2 | 8.9 | 7.6 | 3.1 | 18 | 2.5 | 7.1 | .0 | 10 | 36 | 42 | 12 | 8 | 11 | .1 | 79 | 200 |
| 7 | 16 | 62 | 23.0 | 7.0 | 7.2 | 2.5 | 20 | 2.1 | 7.6 | .0 | 14 | 30 | 36 | 10 | 22 | 10 | .1 | 88 | 2300 |
| 7 | 23 | 62 | 24.0 | 8.1 | 7.4 | 2.6 | 18 | 2.1 | 6.9 | .0 | 7 | 36 | 46 | 9 | 3 | 22 | .1 | 74 | 1600 |
| 7 | 30 | 62 | 23.2 | 8.3 | 7.3 | 4.9 | 26 | 2.7 | 7.8 | .0 | 15 | 30 | 38 | 12 | 10 | 11 | .2 | 100 | 1200 |
| 8 | 6 | 62 | 24.4 | 8.6 | 6.8 | 2.4 | 20 | 2.6 | 8.3 | .0 | 7 | 32 | 36 | 30 | 10 | 16 | .1 | 121 | 880 |
| 8 | 13 | 62 | 23.2 | 7.6 | 6.8 | 1.9 | 23 | 3.8 | - | .1 | 8 | 14 | 24 | 32 | 9 | 11 | .2 | 97 | 4400 |
| 8 | 20 | 62 | 22.0 | 7.6 | 7.1 | 2.8 | 34 | 2.9 | 8.9 | .1 | 16 | 20 | 30 | 32 | 6 | 13 | .1 | 86 | 40 |
| 8 | 28 | 62 | 23.0 | 7.2 | 6.9 | 1.1 | 27 | 4.8 | 9.7 | .0 | 6 | 26 | 36 | 45 | 2 | 12 | .1 | 105 | 5900 |
| 9 | 4 | 62 | 22.4 | 7.4 | 7.0 | 2.0 | 26 | 4.8 | 9.5 | .0 | 7 | 26 | 38 | 35 | 3 | 7 | .1 | 78 | 1200 |
| 9 | 10 | 62 | 21.8 | 7.7 | 7.0 | 3.1 | 29 | 4.6 | 13.5 | .0 | 13 | 28 | 32 | 35 | 6 | 10 | .1 | 112 | 4400 |
| 9 | 17 | 62 | 19.5 | 8.2 | 7.2 | 2.0 | 25 | 3.6 | 8.7 | .1 | 10 | 28 | 36 | 35 | 5 | 11 | .1 | 85 | 1200 |
| 9 | 24 | 62 | 16.0 | 8.6 | 7.2 | 2.5 | 29 | 4.2 | 9.5 | .1 | 31 | 26 | 34 | 26 | 19 | 5 | .1 | 115 | *40 |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** VERMONT

**MAJOR BASIN** NORTHEAST

**MINOR BASIN** CONNECTICUT RIVER

**STATION LOCATION** CONNECTICUT RIVER AT
WILDER, VERMONT

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml.* | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED* *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8 |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS |
| 12 | 29 | 61 | 100 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 120 | 0 | 40 | | | | | | | | | | | | | | | |
| 2 | 12 | 62 | 300 | 20 | 0 | 20 | 0 | 90 | 0 | 70 | 140 | 50 | 20 | | | | | | | | | | | | | | | |
| 2 | 23 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | | | | | | | | | | | | | | | |
| 3 | 9 | 62 | 200 | 20 | 0 | 0 | 0 | 0 | 0 | 60 | 80 | 0 | 0 | | | | | | | | | | | | | | | |
| 3 | 23 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 60 | 0 | 0 | | | | | | | | | | | | | | | |
| 4 | 6 | 62 | 600 | 0 | 40 | 0 | 0 | 20 | 40 | 20 | 460 | 0 | 80 | 87 | 1 | | | | | | | | | | | | | |
| 4 | 20 | 62 | 100 | 0 | 0 | 20 | 0 | 0 | 0 | 80 | 0 | 0 | 80 | | | | | | | | | | | | | | | |
| 5 | 4 | 62 | 200 | 0 | 0 | 20 | 0 | 20 | 0 | 70 | 70 | 0 | 50 | | | | | | | | | | | | | | | |
| 5 | 18 | 62 | 900 | 0 | 0 | 0 | 0 | 530 | 0 | 150 | 190 | 20 | 80 | 57 | 2 | | | | | | | | | | | | | |
| 6 | 8 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 170 | 210 | 170 | 890 | 68 | 1 | | | | | | | | | | | | | |
| 6 | 22 | 62 | 1000 | 0 | 0 | 210 | 0 | 150 | 100 | 100 | 500 | 20 | 20 | | | | | | | | | | | | | | | |
| 7 | 6 | 62 | 2000 | 0 | 0 | 230 | 0 | 0 | 20 | 800 | 930 | 380 | 170 | 68 | 2 | 92 | 1 | 87 | 1 | 73 | 1 | 69 | 1 | | | | | |
| 8 | 3 | 62 | 1000 | 0 | 0 | 80 | 0 | 40 | 0 | 170 | 660 | 40 | 40 | | | | | | | | | | | | | | | |
| 8 | 24 | 62 | 500 | 0 | 0 | 80 | 0 | 0 | 40 | 170 | 210 | 40 | 420 | 68 | 1 | | | | | | | | | | | | | |
| 9 | 7 | 62 | 100 | 0 | 0 | 40 | 0 | 0 | 0 | 10 | 90 | 30 | 30 | | | | | | | | | | | | | | | |
| 9 | 21 | 62 | 100 | 0 | 0 | 20 | 0 | 30 | 0 | 20 | 10 | 30 | 360 | | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** VERMONT
**MAJOR BASIN** NORTHEAST
**MINOR BASIN** CONNECTICUT RIVER
**STATION LOCATION** CONNECTICUT RIVER AT
WILDER, VERMONT 103

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA *(Identifiable)* *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable)* *Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 12 | 29 | 61 | 2 | 13 | 92 | 13 | 93 | 9 | 31 | 5 | 60 | 0 | 10 | 34 | 11 | 3 | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 2 | 12 | 62 | 92 | 16 | 2 | 13 | 65 | 7 | 82 | 6 | 58 | 20 | 10 | 49 | 11 | 3 | 21 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 23 | 62 | 2 | 23 | 92 | 13 | 37 | 9 | 64 | 5 | 50 | 0 | 0 | 32 | 11 | 3 | 10 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 9 | 62 | 37 | 13 | 2 | 72 | 92 | 10 | 14 | 8 | 57 | 40 | 0 | 9 | 11 | 1 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 3 | 23 | 62 | 37 | 27 | 2 | 18 | 64 | 4 | 70 | 4 | 47 | 20 | 0 | 7 | 11 | 1 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 6 | 62 | 64 | 19 | 92 | 15 | 14 | 8 | 65 | 5 | 53 | 0 | 0 | 16 | 11 | 2 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 20 | 62 | 2 | 18 | 64 | 9 | 92 | 6 | 16 | 6 | 61 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 4 | 62 | 2 | 19 | 92 | 15 | 65 | 7 | 64 | 6 | 53 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 5 | 18 | 62 | 92 | 14 | 2 | 12 | 64 | 8 | 36 | 4 | 62 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 6 | 8 | 62 | 92 | 40 | 2 | 11 | 64 | 8 | 14 | 6 | 35 | 0 | 0 | 68 | | | | | | | | | | | 3 | | | | | | | 1 | 0 |
| 6 | 22 | 62 | 2 | 22 | 92 | 12 | 35 | 6 | 56 | 5 | 55 | 20 | 0 | 369 | 11 | 6 | 17 | 5 | 5 | 2 | 1 | 1 | | | 14 | 76 | 1 | 51 | 1 | | | 0 | 0 |
| 7 | 6 | 62 | 57 | 21 | 56 | 16 | 9 | 13 | 2 | 6 | 44 | 0 | 10 | 725 | 17 | 7 | 11 | 6 | 21 | 2 | 1 | 2 | 46 | 1 | 86 | 50 | 4 | 51 | 4 | 76 | 3 | 0 | 0 |
| 8 | 3 | 62 | 2 | 20 | 92 | 7 | 57 | 5 | 27 | 5 | 63 | 0 | 0 | 62 | 11 | 3 | | | | | | | | | 12 | 50 | 2 | 76 | 1 | | | 4 | 4 |
| 8 | 24 | 62 | 2 | 28 | 92 | 13 | 28 | 7 | 57 | 5 | 47 | 0 | 0 | 122 | 11 | 5 | 22 | 1 | | | | | | | 6 | 50 | 1 | 77 | 1 | | | 0 | 0 |
| 9 | 7 | 62 | 92 | 12 | 28 | 10 | 2 | 8 | 57 | 7 | 63 | 0 | 0 | 120 | 11 | 5 | 10 | 2 | 17 | 1 | 22 | 1 | | | 12 | 51 | 2 | 50 | 1 | 76 | 1 | 2 | 1 |
| 9 | 21 | 62 | 92 | 11 | 95 | 10 | 2 | 9 | 57 | 8 | 62 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** CONNECTICUT RIVER

**STATION LOCATION** CONNECTICUT RIVER AT
WILDER, VERMONT

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | ALPHA | | BETA |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | | MO. | DAY | μμc/g | ± | μμc/g |
| 12 | 1 | 61 | 12 | 12 | 0 | 0 | 0 | 1 | 0 | 1 | 27 | 5 | 38 | 5 | 65 | 7 | | | | | | |
| 12 | 8 | 61 | 12 | 18 | 0 | 1 | 0 | 0 | 0 | 1 | 8 | 4 | 22 | 5 | 30 | 6 | | | | | | |
| 12 | 15 | 61 | 12 | 21 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 4 | 16 | 5 | 22 | 6 | | | | | | |
| 12 | 22 | 61 | 12 | 28 | 0 | 0 | 0 | 1 | 0 | 1 | 9 | 4 | 20 | 5 | 29 | 6 | | | | | | |
| 12 | 29 | 61 | 1 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 13 | 4 | 21 | 5 | 34 | 6 | | | | | | |
| 1 | 5 | 62 | 1 | 11 | 1 | 2 | 0 | 1 | 1 | 2 | 13 | 7 | 20 | 5 | 33 | 9 | | | | | | |
| 1 | 15 | 62 | 1 | 22 | 0 | 2 | 0 | 2 | 0 | 3 | 4 | 17 | 36 | 15 | 40 | 23 | | | | | | |
| 1 | 22 | 62 | 2 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 15 | 5 | 33 | 5 | 48 | 7 | | | | | | |
| 1 | 26 | 62 | 2 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 9 | 4 | 23 | 4 | 32 | 6 | | | | | | |
| 2 | 2 | 62 | 2 | 13 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 4 | 12 | 5 | 16 | 6 | | | | | | |
| 2 | 12 | 62 | 2 | 23 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 4 | 13 | 4 | 21 | 6 | | | | | | |
| 2 | 16 | 62 | 2 | 26 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 4 | 14 | 5 | 19 | 6 | | | | | | |
| 2 | 23 | 62 | 3 | 7 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 4 | 11 | 4 | 16 | 6 | | | | | | |
| 3 | 2 | 62 | 3 | 16 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 5 | 13 | 6 | 20 | 8 | | | | | | |
| 3 | 9 | 62 | 3 | 20 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 5 | 19 | 6 | 26 | 8 | | | | | | |
| 3 | 16 | 62 | 3 | 27 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 4 | 12 | 4 | 16 | 6 | | | | | | |
| 3 | 23 | 62 | 4 | 3 | 0 | 1 | 0 | 1 | 0 | 1 | 12 | 4 | 27 | 5 | 39 | 6 | | | | | | |
| 3 | 30 | 62 | 4 | 9 | 0 | 0 | 0 | 1 | 0 | 1 | 15 | 6 | 29 | 7 | 44 | 9 | | | | | | |
| 4 | 6 | 62 | 4 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 4 | 19 | 5 | 34 | 6 | | | | | | |
| 4 | 13 | 62 | 4 | 24 | 0 | 1 | 0 | 1 | 0 | 1 | 10 | 4 | 21 | 5 | 31 | 6 | | | | | | |
| 4 | 20 | 62 | 5 | 23 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 5 | 17 | 6 | 24 | 7 | | | | | | |
| 4 | 27 | 62 | 5 | 24 | 0 | 0 | 1 | 1 | 1 | 1 | 5 | 5 | 15 | 6 | 20 | 7 | | | | | | |
| 5 | 18 | 62 | 6 | 22 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 3 | 10 | 3 | 15 | 4 | | | | | | |
| 5 | 25 | 62 | 6 | 27 | 0 | 0 | 0 | 1 | 0 | 1 | 12 | 6 | 27 | 6 | 39 | 8 | | | | | | |
| 6 | 1 | 62 | 7 | 3 | 0 | 1 | 0 | 0 | 0 | 1 | 11 | 7 | 13 | 6 | 24 | 9 | | | | | | |
| 6 | 8 | 62 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 12 | 7 | 15 | 9 | | | | | | |
| 6 | 15 | 62 | 7 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 16 | 5 | 20 | 6 | | | | | | |
| 6 | 22 | 62 | 7 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 1 | 6 | 1 | 9 | | | | | | |
| 6 | 29 | 62 | 7 | 25 | 0 | 0 | 1 | 1 | 1 | 1 | 12 | 6 | 14 | 6 | 26 | 8 | | | | | | |
| 7 | 6 | 62 | 8 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 7 | 15 | 7 | 17 | 10 | | | | | | |
| 8 | 3 | 62 | 8 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 5 | 28 | 6 | 39 | 7 | | | | | | |
| 8 | 10 | 62 | 8 | 23 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 5 | 18 | 6 | 25 | 7 | | | | | | |
| 8 | 17 | 62 | 9 | 5 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 3 | 16 | 3 | 17 | 4 | | | | | | |
| 8 | 24 | 62 | 9 | 10 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 6 | 1 | 7 | 9 | 9 | | | | | | |
| 8 | 31 | 62 | 9 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 20 | 6 | 26 | 7 | | | | | | |
| 9 | 7 | 62 | 9 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 | 17 | 7 | 21 | 8 | | | | | | |
| 9 | 14 | 62 | 10 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 6 | 13 | 7 | 15 | 9 | | | | | | |
| 9 | 21 | 62 | 10 | 15 | 0 | 0 | 1 | 1 | 1 | 1 | 44 | 7 | 7 | 7 | 51 | 10 | | | | | | |
| 9 | 28 | 62 | 10 | 23 | 0 | 1 | 0 | 0 | 0 | 1 | 10 | 5 | 17 | 6 | 27 | 8 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

## ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** VERMONT
**MAJOR BASIN** NORTHEAST
**MINOR BASIN** CONNECTICUT RIVER
**STATION LOCATION** CONNECTICUT RIVER AT
WILDER, VERMONT

103

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 12 | 1 | 61 | 12 | 15 | 5062 | 184 | 51 | 133 | 3 | 13 | 13 | 3 | 2 | 8 | 0 | 6 | 3 | 1 | 12 |
| 1 | 4 | 62 | 1 | 22 | 5208 | 294 | 77 | 217 | 5 | 21 | 18 | 2 | 2 | 13 | 1 | 10 | 6 | 1 | 16 |
| 2 | 12 | 62 | 2 | 26 | 5030 | 257 | 79 | 178 | 7 | 17 | 17 | 2 | 2 | 13 | 0 | 10 | 8 | 1 | 19 |
| 3 | 27 | 62 | 4 | 5 | 2217 | 435 | 155 | 280 | 9 | 36 | 45 | 6 | 4 | 30 | 5 | 30 | 16 | 1 | 18 |
| 4 | 19 | 62 | 5 | 4 | 5739 | 196 | 93 | 103 | 2 | 28 | 23 | 3 | 2 | 17 | 1 | 11 | 10 | 1 | 18 |
| 5 | 25 | 62 | 6 | 8 | 5009 | 220 | 86 | 134 | 3 | 21 | 17 | 2 | 2 | 12 | 1 | 10 | 8 | 1 | 26 |
| 6 | 29 | 62 | 7 | 13 | 3590 | 201 | 107 | 94 | 3 | 36 | 23 | 3 | 2 | 18 | 0 | 13 | 12 | 2 | 18 |
| 7 | 31 | 62 | 8 | 14 | 5112 | 255 | 132 | 123 | 4 | 37 | 23 | 2 | 1 | 19 | 1 | 15 | 20 | 1 | 32 |
| 8 | 31 | 62 | 9 | 14 | 5118 | 233 | 81 | 152 | 2 | 21 | 20 | 2 | 1 | 17 | 0 | 10 | 10 | 1 | 17 |

NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

| | |
|---|---|
| STATE | VERMONT |
| MAJOR BASIN | NORTHEAST |
| MINOR BASIN | CONNECTICUT RIVER |
| STATION LOCATION | CONNECTICUT RIVER AT<br>WILDER, VERMONT |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLV SOLIDS mg/l |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | |
| 12 | 1 | 61 | - | - | - | - | - | - | - | - | 7 | 20 | - | 0 | - | 20 | .0 | |
| 12 | 15 | 61 | - | - | - | - | - | - | - | - | 8 | 22 | 60 | 5 | - | 20 | - | |
| 12 | 22 | 61 | - | - | - | - | - | - | - | - | 7 | 24 | - | - | - | 21 | - | |
| 12 | 26 | 61 | - | - | - | - | - | - | - | - | 8 | - | 76 | - | - | 26 | - | |
| 12 | 29 | 61 | - | - | 7.4 | - | - | - | - | - | 10 | - | 80 | 40 | - | 63 | - | |
| 1 | 15 | 62 | - | - | - | - | - | - | - | - | 5 | 14 | 48 | - | - | 17 | .0 | 7 |
| 1 | 22 | 62 | - | - | - | - | 27 | - | - | - | 6 | 24 | - | 30 | - | 20 | - | 10 |
| 1 | 26 | 62 | - | - | - | - | - | - | - | - | 8 | - | 56 | - | - | 29 | - | |
| 2 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | 40 | 30 | - | 21 | - | 10 |
| 2 | 12 | 62 | - | - | - | - | - | - | - | - | 5 | - | - | - | - | 18 | - | |
| 2 | 16 | 62 | - | - | - | - | - | - | - | - | 9 | - | - | 80 | - | - | - | |
| 2 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | 52 | 35 | 0 | 30 | - | |
| 2 | 26 | 62 | - | - | - | - | 35 | - | - | - | - | - | - | - | - | - | - | |
| 3 | 30 | 62 | - | - | - | - | - | - | - | - | 10 | 28 | 44 | 25 | - | 21 | .0 | |
| 4 | 5 | 62 | - | - | - | - | 24 | - | - | - | - | - | - | - | - | - | - | |
| 4 | 6 | 62 | - | - | - | - | - | - | - | - | 8 | 20 | 32 | 35 | - | 18 | .0 | |
| 4 | 13 | 62 | - | - | - | - | - | - | - | - | 4 | 18 | 40 | 35 | - | 15 | - | |
| 4 | 20 | 62 | - | - | - | - | - | - | - | - | 8 | - | - | 25 | - | 22 | - | |
| 4 | 27 | 62 | - | - | - | - | - | - | - | - | 4 | - | - | 10 | - | 8 | - | 8 |
| 5 | 4 | 62 | - | - | - | - | 16 | - | - | - | - | - | - | - | - | - | - | |
| 5 | 18 | 62 | - | - | - | - | - | - | - | - | 8 | 36 | 48 | 25 | 25 | 7 | .0 | |
| 5 | 25 | 62 | - | - | - | - | - | - | - | - | 6 | 24 | 32 | 30 | - | 14 | .0 | |
| 6 | 8 | 62 | - | - | - | - | 30 | - | - | - | - | - | - | - | - | - | - | |
| 7 | 6 | 62 | - | - | 7.9 | - | - | - | - | - | 2 | 36 | 64 | 15 | *25 | 17 | .0 | 10 |
| 7 | 13 | 62 | - | - | - | - | 24 | - | - | - | - | - | - | - | - | - | - | |
| 8 | 10 | 62 | - | - | - | - | - | - | - | - | 6 | - | - | 30 | - | 18 | - | 10 |
| 8 | 17 | 62 | - | - | - | - | - | - | - | - | 7 | 32 | 40 | 20 | 25 | - | - | 6 |
| 9 | 14 | 62 | - | - | - | - | 22 | - | - | - | - | - | - | - | - | - | - | |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Wilder, Vermont
Operated by U.S. Geological Survey

MAJOR BASIN Northeast

MINOR BASIN Connecticut River

STATION LOCATION Connecticut River at Wilder, Vermont

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .019 | 1.820 | 3.600 | .480 | 3.020 | 3.240 | 25.000 | 23.000 | 5.330 | .101 | 8.770 | 3.220 |
| 2 | 1.510 | 2.040 | 1.010 | 4.710 | 3.530 | 2.830 | 27.100 | 24.900 | 1.820 | 3.050 | 8.650 | .673 |
| 3 | 2.090 | 1.540 | .066 | 3.640 | 1.420 | 1.350 | 24.100 | 23.800 | .165 | 1.910 | 7.200 | .801 |
| 4 | 2.050 | .117 | 3.600 | 3.400 | .392 | .150 | 18.300 | 19.600 | 3.910 | .106 | 2.420 | 2.650 |
| 5 | 1.770 | .009 | 4.560 | 3.530 | 2.410 | 3.350 | 15.700 | 14.800 | 3.900 | 1.720 | .064 | 2.920 |
| 6 | 1.260 | 2.830 | 7.110 | 2.210 | 3.540 | 2.850 | 16.100 | 12.700 | 3.580 | 1.700 | 3.910 | 2.920 |
| 7 | .017 | 3.460 | 9.320 | .350 | 3.350 | 2.950 | 18.100 | 11.600 | 3.260 | .126 | 5.100 | 3.280 |
| 8 | .017 | 3.990 | 9.310 | 2.500 | 2.720 | 2.950 | 29.300 | 11.200 | 3.010 | .068 | 9.000 | 1.240 |
| 9 | 1.710 | 3.960 | 3.940 | 3.270 | 2.740 | 2.250 | 31.300 | 10.600 | 1.400 | 1.470 | 9.160 | .056 |
| 10 | 2.020 | 3.650 | .090 | 4.040 | 1.640 | 1.290 | 31.800 | 9.340 | .705 | 1.680 | 8.730 | 3.260 |
| 11 | 2.120 | .317 | 4.410 | 3.940 | .190 | .130 | 29.000 | 8.460 | 2.980 | 1.780 | 6.200 | 4.560 |
| 12 | .439 | .043 | 5.010 | 3.660 | 3.890 | 4.510 | 24.300 | 3.860 | 3.260 | 1.800 | .637 | 4.590 |
| 13 | 2.170 | 2.610 | 5.610 | .650 | 3.680 | 2.680 | 21.300 | .910 | 3.170 | 2.030 | 5.560 | 4.150 |
| 14 | .074 | 3.560 | 5.480 | .070 | 3.780 | 2.800 | 17.800 | 6.470 | 2.560 | .061 | 3.980 | 4.690 |
| 15 | .177 | 3.620 | 4.370 | 3.800 | 2.480 | 2.900 | 14.500 | 6.910 | 3.060 | .806 | 6.260 | 1.640 |
| 16 | 2.700 | 3.670 | 2.330 | 3.740 | 2.980 | 2.890 | 10.600 | 5.920 | .110 | 3.800 | 7.800 | 1.130 |
| 17 | 3.000 | 2.860 | .330 | 4.500 | 1.180 | 1.340 | 10.100 | 4.900 | .079 | 3.460 | 6.370 | 3.890 |
| 18 | 2.570 | .740 | 3.360 | 4.600 | .430 | .460 | 9.260 | 5.340 | 2.610 | 3.200 | 2.690 | 4.970 |
| 19 | 2.200 | .087 | 4.740 | 5.220 | 2.780 | 2.630 | 9.880 | 4.480 | 2.510 | 2.740 | .785 | 5.140 |
| 20 | 2.210 | 4.080 | 4.450 | 2.390 | 2.680 | 3.380 | 9.970 | 1.070 | 2.560 | 2.950 | 4.180 | 4.620 |
| 21 | .141 | 3.910 | 4.450 | 1.120 | 3.080 | 3.140 | 9.240 | 7.150 | 2.340 | 2.260 | 5.640 | 4.250 |
| 22 | .558 | 3.430 | 3.400 | 3.890 | 2.880 | 2.820 | 7.520 | 12.000 | 2.480 | 1.030 | 6.480 | 1.560 |
| 23 | 2.420 | .540 | .920 | 3.970 | 2.580 | 3.100 | 8.220 | 9.670 | 1.610 | 2.750 | 6.490 | .710 |
| 24 | 2.220 | 3.990 | .455 | 4.180 | .970 | 1.410 | 13.500 | 8.670 | .654 | 3.200 | 5.720 | 3.410 |
| 25 | 1.940 | 3.100 | .410 | 3.780 | .185 | .160 | 13.800 | 9.690 | 2.530 | 3.270 | 1.560 | 3.990 |
| 26 | 2.300 | 1.140 | 5.410 | 3.290 | 3.790 | 4.220 | 11.600 | 10.000 | 2.880 | 3.060 | .035 | 3.590 |
| 27 | 1.790 | 3.310 | 5.830 | .650 | 3.280 | 4.290 | 10.000 | 7.640 | 2.870 | 3.510 | 3.080 | 4.250 |
| 28 | .053 | 3.160 | 5.840 | .200 | 3.370 | 4.690 | 13.000 | 5.700 | 2.950 | .451 | 3.680 | 3.920 |
| 29 | .029 | 3.650 | 3.920 | 4.690 |  | 8.110 | 17.000 | 5.490 | 2.440 | .022 | 3.610 | 2.190 |
| 30 | 2.020 | 4.320 | 1.750 | 4.130 |  | 9.800 | 18.000 | 2.690 | .134 | 3.580 | 3.010 | .972 |
| 31 | 2.140 |  | .520 | 4.340 |  | 15.200 |  | 6.580 |  | 6.280 | 4.810 |  |

Computed as sum of Connecticut River at White River Junction, Vermont minus the sum of White River at West Hartford, Vermont.

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 10 | 61 | 100 | 0 | 0 | 0 | 0 | 50 | 0 | 20 | 0 | 20 | 50 | | | | | | | | | | | | | | | | | | | | |
| 10 | 24 | 61 | 200 | 20 | 0 | 20 | 0 | 0 | 0 | 210 | 0 | 20 | 60 | | | | | | | | | | | | | | | | | | | | |
| 11 | 7 | 61 | 500 | 0 | 0 | 20 | 0 | 20 | 0 | 440 | 0 | 100 | 40 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 11 | 21 | 61 | 400 | 0 | 0 | 20 | 0 | 110 | 0 | 270 | 0 | 160 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 12 | 61 | 3800 | 50 | 50 | 90 | 0 | 200 | 70 | 2810 | 500 | 1010 | 650 | 69 | 4 | 71 | 3 | 68 | 3 | | | | | | | | | | | | | | |
| 12 | 19 | 61 | 700 | 0 | 0 | 0 | 0 | 40 | 0 | 410 | 270 | 100 | 40 | | | | | | | | | | | | | | | | | | | | |
| 1 | 23 | 62 | 1500 | 0 | 0 | 0 | 0 | 0 | 0 | 410 | 1060 | 230 | 210 | 87 | 1 | 69 | 1 | 81 | 1 | | | | | | | | | | | | | | |
| 2 | 6 | 62 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 160 | 180 | 50 | 0 | | | | | | | | | | | | | | | | | | | | |
| 9 | 7 | 62 | 200 | 0 | 0 | 40 | 0 | 0 | 0 | 170 | 0 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |

MINOR BASIN CUMBERLAND RIVER

**STATION LOCATION** CUMBERLAND RIVER AT

CLARKSVILLE, TENNESSEE 070

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 10 | 61 | | | | | | | | | | 0 | 0 | 7 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 24 | 61 | 57 | 58 | 82 | 17 | 56 | 9 | 71 | 2 | 14 | 560 | 0 | 8 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 7 | 61 | 57 | 37 | 82 | 13 | 56 | 9 | 10 | 4 | 37 | 0 | 0 | 4 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 21 | 61 | 57 | 71 | 82 | 6 | 56 | 6 | 32 | 2 | 15 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 12 | 61 | 57 | 23 | 92 | 7 | 62 | 6 | 47 | 6 | 58 | 320 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 12 | 19 | 61 | 62 | 14 | 57 | 10 | 47 | 9 | 92 | 7 | 60 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 23 | 62 | | | | | | | | | | 520 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 6 | 62 | 57 | 40 | 56 | 18 | 82 | 12 | 80 | 4 | 26 | 20 | 10 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 7 | 62 | 57 | 28 | 82 | 15 | 71 | 11 | 56 | 9 | 37 | 0 | 0 | 26 | 17 | 3 | | | | | | | | | 0 | | | | | | | 0 | 0 |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** CUMBERLAND RIVER

**STATION LOCATION** CUMBERLAND RIVER AT
CLARKSVILLE, TENNESSEE

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 10 | 61 | 10 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 3 | 4 | 3 | 6 | | | | | | |
| 10 | 24 | 61 | 11 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 4 | 5 | 4 | 6 | 6 | | | | | | |
| 10 | 31 | 61 | 11 | 15 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 4 | 6 | 5 | 8 | 6 | | | | | | |
| 11 | 7 | 61 | 11 | 22 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 5 | 6 | 5 | 9 | 7 | | | | | | |
| 11 | 21 | 61 | 12 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 4 | 14 | 5 | 18 | 6 | | | | | | |
| 12 | 12 | 61 | 12 | 19 | 1 | 1 | 0 | 1 | 1 | 1 | 39 | 6 | 34 | 5 | 73 | 8 | | | | | | |
| 12 | 19 | 61 | 12 | 28 | 1 | 1 | 0 | 0 | 1 | 1 | 56 | 6 | 23 | 5 | 79 | 8 | | | | | | |
| 1 | 23 | 62 | 2 | 2 | 4 | 4 | 0 | 1 | 4 | 4 | 47 | 9 | 25 | 5 | 72 | 10 | | | | | | |
| 2 | 6 | 62 | 2 | 19 | - | - | - | - | - | - | 5 | 5 | 7 | 6 | 12 | 8 | | | | | | |

**MINOR BASIN** CUMBERLAND RIVER

**STATION LOCATION** CUMBERLAND RIVER AT

CLARKSVILLE, TENNESSEE 70

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 10 | 61 | - | - | 8.0 | - | - | - | - | - | - | - | 80 | 15 | - | 27 | .1 | 102 | - |
| 10 | 24 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 43 | .1 | 100 | *10 |
| 10 | 31 | 61 | - | - | - | - | - | - | - | - | 5 | 50 | 68 | 5 | - | - | - | - | 470 |
| 11 | 7 | 61 | - | - | - | - | - | - | - | - | 6 | 50 | 72 | 5 | 0 | 25 | - | - | 80 |
| 11 | 21 | 61 | - | - | - | - | - | - | - | - | 6 | - | 68 | - | - | 22 | - | - | 60 |
| 12 | 12 | 61 | - | - | - | - | - | - | - | - | 7 | 76 | - | 5 | - | 22 | .1 | - | 5700 |
| 12 | 19 | 61 | - | - | - | - | - | - | - | - | 5 | 84 | 96 | - | - | 17 | - | - | - |
| 1 | 23 | 62 | - | - | - | - | - | - | - | - | 3 | - | - | - | - | 26 | - | - | - |
| 2 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 22 | .0 | - | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Dover, Tennessee
Operated by U.S. Geological Survey

STATE Tennessee
MAJOR BASIN Ohio River
MINOR BASIN Cumberland River
STATION LOCATION Cumberland River at Clarksville, Tennessee

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.330 | 6.670 | 11.600 | 24.200 | 65.800 | 190.000 | 105.000 | 51.600 | 11.700 | 15.900 | 9.380 | 7.790 |
| 2 | 7.040 | 6.410 | 8.570 | 23.600 | 58.300 | 199.000 | 104.000 | 52.800 | 13.700 | 16.000 | 11.100 | 8.790 |
| 3 | 7.250 | 6.350 | 7.440 | 25.900 | 50.800 | 186.000 | 93.700 | 48.700 | 16.800 | 11.900 | 8.450 | 9.340 |
| 4 | 9.350 | 6.860 | 7.570 | 26.800 | 44.000 | 165.000 | 81.600 | 47.300 | 14.700 | 9.070 | 7.550 | 8.450 |
| 5 | 16.000 | 6.630 | 7.630 | 25.600 | 38.500 | 140.000 | 71.900 | 43.100 | 12.100 | 9.210 | 8.850 | 7.960 |
| 6 | 15.800 | 6.490 | 10.800 | 48.200 | 37.300 | 120.000 | 70.600 | 39.500 | 12.700 | 20.200 | 8.450 | 7.790 |
| 7 | 11.500 | 9.310 | 12.300 | 69.800 | 36.800 | 106.000 | 85.900 | 37.600 | 13.700 | 20.100 | 8.180 | 7.620 |
| 8 | 6.230 | 13.400 | 14.200 | 62.800 | 35.700 | 97.700 | 101.000 | 33.400 | 22.500 | 12.900 | 11.400 | 10.200 |
| 9 | 6.170 | 9.960 | 20.900 | 45.900 | 38.600 | 102.000 | 103.000 | 33.900 | 16.000 | 12.400 | 10.900 | 10.200 |
| 10 | 7.610 | 10.700 | 49.400 | 36.300 | 47.100 | 113.000 | 99.500 | 32.300 | 16.500 | 15.400 | 8.390 | 8.110 |
| 11 | 5.170 | 10.100 | 60.100 | 33.200 | 47.900 | 115.000 | 114.000 | 31.100 | 14.900 | 13.700 | 8.750 | 4.840 |
| 12 | 6.020 | 10.200 | 48.300 | 30.700 | 46.600 | 109.000 | 130.000 | 33.700 | 21.400 | 13.000 | 10.500 | 3.360 |
| 13 | 5.570 | 8.610 | 37.400 | 31.500 | 43.900 | 106.000 | 139.000 | 36.700 | 27.700 | 14.300 | 9.020 | 4.860 |
| 14 | 6.870 | 8.870 | 29.000 | 30.800 | 40.200 | 102.000 | 142.000 | 36.500 | 17.400 | 10.500 | 8.320 | 11.400 |
| 15 | 6.930 | 11.100 | 21.700 | 30.900 | 38.800 | 95.900 | 135.000 | 29.300 | 19.800 | 8.010 | 7.900 | 8.720 |
| 16 | 5.460 | 14.000 | 21.200 | 38.500 | 38.800 | 89.400 | 123.000 | 30.700 | 17.300 | 10.400 | 7.830 | 8.120 |
| 17 | 6.430 | 14.200 | 42.800 | 39.600 | 47.500 | 82.400 | 113.000 | 28.600 | 10.600 | 10.300 | 7.790 | 13.000 |
| 18 | 6.550 | 10.700 | 63.700 | 34.400 | 47.700 | 81.300 | 103.000 | 20.500 | 9.180 | 8.610 | 7.640 | 9.660 |
| 19 | 6.270 | 9.860 | 86.700 | 30.100 | 38.200 | 74.500 | 95.900 | 15.300 | 10.300 | 8.260 | 7.620 | 7.400 |
| 20 | 6.120 | 8.820 | 75.700 | 32.800 | 33.400 | 72.100 | 88.800 | 15.500 | 16.300 | 9.970 | 7.440 | 6.380 |
| 21 | 5.940 | 10.800 | 49.100 | 38.700 | 31.500 | 83.800 | 83.900 | 16.900 | 23.500 | 9.280 | 7.640 | 6.000 |
| 22 | 6.060 | 12.200 | 34.900 | 43.500 | 40.600 | 97.300 | 74.500 | 14.400 | 19.100 | 7.960 | 7.620 | 5.830 |
| 23 | 5.920 | 12.800 | 30.300 | 76.300 | 42.500 | 93.300 | 68.100 | 8.240 | 15.800 | 6.850 | 7.810 | 5.870 |
| 24 | 5.800 | 11.700 | 28.600 | 103.000 | 70.300 | 86.100 | 63.000 | 8.970 | 16.000 | 5.870 | 7.810 | 5.990 |
| 25 | 5.800 | 8.690 | 27.600 | 110.000 | 89.600 | 76.300 | 58.100 | 9.300 | 15.000 | 6.830 | 7.440 | 6.130 |
| 26 | 5.820 | 9.260 | 28.100 | 88.900 | 99.400 | 70.300 | 52.900 | 9.530 | 13.600 | 9.500 | 8.790 | 6.510 |
| 27 | 6.230 | 11.100 | 28.600 | 73.500 | 130.000 | 78.800 | 50.900 | 9.450 | 11.100 | 11.800 | 8.750 | 6.520 |
| 28 | 5.980 | 7.630 | 29.500 | 70.400 | 158.000 | 74.600 | 50.500 | 9.860 | 16.900 | 10.200 | 7.830 | 6.430 |
| 29 | 5.840 | 9.210 | 29.500 | 71.800 |  | 67.900 | 50.800 | 12.400 | 18.200 | 8.550 | 8.910 | 6.090 |
| 30 | 6.230 | 11.400 | 25.700 | 71.100 |  | 63.700 | 49.500 | 13.100 | 22.700 | 8.790 | 8.300 | 6.110 |
| 31 | 6.570 |  | 24.100 | 68.100 |  | 85.500 |  | 10.900 |  | 7.950 | 7.750 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** PENNSYLVANIA
**MAJOR BASIN** NORTH ATLANTIC
**MINOR BASIN** DELAWARE-SCHUYLKILL RIVERS
**STATION LOCATION** DELAWARE RIVER AT
PHILADELPHIA, PENNSYLVANIA 12

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 16 | - | - | - | - | - | - | 7 | 5 | 6 | 6 | 13 | 8 | | | | | | |
| 10 | 9 | 61 | 10 | 18 | - | - | - | - | - | - | 1 | 5 | 17 | 6 | 18 | 8 | | | | | | |
| 10 | 17 | 61 | 11 | 1 | - | - | - | - | - | - | 15 | 11 | 19 | 15 | 34 | 18 | | | | | | |
| 10 | 23 | 61 | 11 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 4 | 13 | 5 | 19 | 6 | | | | | | |
| 2 | 26 | 62 | 3 | 13 | 1 | 1 | 1 | 1 | 2 | 1 | 147 | 8 | 50 | 6 | 197 | 10 | | | | | | |
| 3 | 5 | 62 | 3 | 20 | - | - | - | - | - | - | 72 | 9 | 38 | 7 | 110 | 11 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | - | - | - | - | - | - | 40 | 8 | 45 | 7 | 85 | 11 | | | | | | |
| 3 | 19 | 62 | 4 | 3 | - | - | - | - | - | - | 35 | 7 | 22 | 6 | 57 | 9 | | | | | | |
| 3 | 26 | 62 | 4 | 10 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 4 | 21 | 5 | 29 | 6 | | | | | | |
| 4 | 2 | 62 | 4 | 13 | - | - | - | - | - | - | 25 | 7 | 21 | 7 | 46 | 10 | | | | | | |
| 4 | 9 | 62 | 4 | 27 | - | - | - | - | - | - | 22 | 6 | 26 | 6 | 48 | 8 | | | | | | |
| 4 | 16 | 62 | 5 | 23 | - | - | - | - | - | - | 8 | 7 | 9 | 7 | 17 | 10 | | | | | | |
| 4 | 30 | 62 | 6 | 6 | 8 | 5 | 0 | 3 | 8 | 6 | 15 | 10 | 6 | 6 | 21 | 12 | | | | | | |
| 5 | 7 | 62 | 6 | 20 | - | - | - | - | - | - | 4 | 7 | 15 | 7 | 19 | 10 | | | | | | |
| 5 | 14 | 62 | 6 | 21 | - | - | - | - | - | - | 3 | 7 | 8 | 7 | 11 | 10 | | | | | | |
| 5 | 21 | 62 | 6 | 27 | - | - | - | - | - | - | 11 | 9 | 5 | 7 | 16 | 11 | | | | | | |
| 5 | 27 | 62 | 6 | 28 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 6 | 18 | 6 | 22 | 8 | | | | | | |
| 6 | 4 | 62 | 7 | 5 | - | - | - | - | - | - | 8 | 6 | 16 | 7 | 24 | 9 | | | | | | |
| 6 | 11 | 62 | 7 | 18 | - | - | - | - | - | - | 4 | 5 | 13 | 7 | 17 | 9 | | | | | | |
| 6 | 18 | 62 | 7 | 17 | - | - | - | - | - | - | 4 | 10 | 43 | 8 | 47 | 13 | | | | | | |
| 6 | 25 | 62 | 7 | 25 | 1 | 1 | 0 | 0 | 1 | 1 | 10 | 6 | 15 | 6 | 25 | 8 | | | | | | |
| 7 | 2 | 62 | 8 | 3 | - | - | - | - | - | - | 5 | 8 | 4 | 8 | 9 | 11 | | | | | | |
| 7 | 9 | 62 | 8 | 6 | - | - | - | - | - | - | 3 | 6 | 16 | 7 | 19 | 9 | | | | | | |
| 7 | 23 | 62 | 8 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 20 | 7 | 30 | 9 | | | | | | |
| 7 | 30 | 62 | 8 | 21 | - | - | - | - | - | - | 13 | 5 | 4 | 6 | 17 | 8 | | | | | | |
| 8 | 13 | 62 | 8 | 28 | - | - | - | - | - | - | 9 | 6 | 13 | 7 | 22 | 9 | | | | | | |
| 9 | 4 | 62 | 9 | 18 | 0 | 1 | 0 | 0 | 0 | 1 | 7 | 6 | 17 | 8 | 24 | 10 | | | | | | |
| 9 | 6 | 62 | 10 | 8 | - | - | - | - | - | - | 1 | 5 | 12 | 7 | 13 | 8 | | | | | | |
| 9 | 10 | 62 | 10 | 2 | - | - | - | - | - | - | 6 | 6 | 14 | 8 | 20 | 10 | | | | | | |
| 9 | 17 | 62 | 10 | 9 | - | - | - | - | - | - | 5 | 5 | 16 | 7 | 21 | 9 | | | | | | |
| 9 | 24 | 62 | 10 | 22 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 3 | 11 | 3 | 18 | 4 | | | | | | |

# PLANKTON POPULATION

**STATE** PENNSYLVANIA

**MAJOR BASIN** NORTH ATLANTIC

**MINOR BASIN** DELAWARE-SCHUYLKILL RIVERS

**STATION LOCATION** DELAWARE RIVER AT
PHILADELPHIA, PENNSYLVANIA 12

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 1000 | 0 | 0 | 90 | 0 | 200 | 0 | 690 | 20 | 670 | 340 | 68 | 2 | | | | | | | | | | | | | | | | | | |
| 10 | 17 | 61 | 800 | 0 | 0 | 210 | 0 | 80 | 0 | 330 | 170 | 230 | 190 | 68 | 1 | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 1500 | 40 | 190 | 330 | 0 | 130 | 0 | 680 | 170 | 40 | 100 | 69 | 2 | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 1000 | 0 | 0 | 170 | 0 | 80 | 0 | 540 | 230 | 20 | 210 | 68 | 2 | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 1500 | 0 | 0 | 20 | 0 | 60 | 0 | 580 | 790 | 40 | 390 | 67 | 2 | 92 | 2 | 97 | 1 | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 800 | 0 | 0 | 0 | 0 | 0 | 0 | 250 | 520 | 20 | 190 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 200 | 0 | 20 | 40 | 0 | 0 | 0 | 50 | 110 | 130 | 420 | | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 1000 | 0 | 20 | 80 | 0 | 20 | 0 | 60 | 810 | 60 | 370 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 360 | 160 | 630 | 92 | 1 | 77 | 1 | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 1500 | 80 | 0 | 0 | 0 | 170 | 130 | 460 | 660 | 20 | 40 | 67 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 3 | 6 | 62 | 600 | 0 | 0 | 0 | 0 | 90 | 20 | 40 | 490 | 0 | 110 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 500 | 0 | 0 | 0 | 20 | 20 | 20 | 50 | 380 | 0 | 110 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 1700 | 0 | 20 | 20 | 0 | 40 | 0 | 80 | 1510 | 20 | 230 | 92 | 2 | 88 | 1 | 87 | 1 | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 700 | 90 | 0 | 90 | 0 | 0 | 90 | 230 | 160 | 50 | 90 | | | | | | | | | | | | | | | | | | | | |
| 5 | 2 | 62 | 1300 | 60 | 0 | 250 | 0 | 130 | 40 | 340 | 490 | 340 | 590 | 92 | 1 | 68 | 1 | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 2300 | 0 | 130 | 460 | 0 | 130 | 0 | 440 | 1140 | 840 | 1080 | 92 | 3 | 68 | 2 | 24 | 1 | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 3200 | 480 | 0 | 950 | 0 | 80 | 80 | 770 | 870 | 830 | 370 | 38 | 2 | 68 | 2 | 92 | 2 | 3 | 1 | 2 | 1 | | | | | | | | | | |
| 6 | 18 | 62 | 4700 | 330 | 0 | 1900 | 0 | 330 | 0 | 1370 | 750 | 700 | 290 | 38 | 3 | 68 | 3 | 69 | 2 | 92 | 2 | 3 | 1 | 40 | 1 | 51 | 1 | 24 | 1 | 25 | 1 | | |
| 7 | 2 | 62 | 11800 | 250 | 0 | 4750 | 40 | 340 | 0 | 4260 | 2110 | 1310 | 1480 | 68 | 5 | 26 | 4 | 67 | 3 | 24 | 3 | 38 | 3 | 30 | 2 | 51 | 1 | 25 | 1 | 2 | 1 | | |
| 7 | 16 | 62 | 5300 | 420 | 0 | 1430 | 0 | 300 | 40 | 2750 | 380 | 680 | 170 | 68 | 4 | 69 | 3 | 26 | 2 | 38 | 2 | 67 | 1 | 2 | 1 | 3 | 1 | 51 | 1 | 41 | 1 | | |
| 8 | 6 | 62 | 3400 | 80 | 110 | 1350 | 0 | 130 | 210 | 1010 | 460 | 250 | 420 | 68 | 2 | 38 | 2 | 25 | 2 | 67 | 1 | 69 | 1 | 60 | 1 | | | | | | | | |
| 8 | 20 | 62 | 2900 | 40 | 0 | 1220 | 0 | 330 | 80 | 750 | 500 | 120 | 120 | 69 | 2 | 25 | 2 | 51 | 2 | 67 | 2 | 38 | 1 | 24 | 1 | 30 | 1 | | | | | | |
| 9 | 4 | 62 | 1500 | 40 | 40 | 500 | 0 | 170 | 0 | 330 | 410 | 170 | 40 | 38 | 1 | 68 | 1 | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 400 | 0 | 0 | 210 | 0 | 20 | 0 | 190 | 10 | 110 | 30 | | | | | | | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** PENNSYLVANIA
**MAJOR BASIN** NORTH ATLANTIC
**MINOR BASIN** DELAWARE-SCHUYLKILL RIVERS
**STATION LOCATION** DELAWARE RIVER AT
PHILADELPHIA, PENNSYLVANIA 012

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 29 | 60 | 58 | 9 | 56 | 7 | 97 | 4 | 20 | 0 | 0 | 155 | 11 | 5 | 16 | 3 | 17 | 1 | | | | | 15 | 50 | 2 | | | | | 0 | 0 |
| 10 | 17 | 61 | 29 | 79 | 56 | 5 | 58 | 4 | 19 | 2 | 10 | 0 | 0 | 5 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 29 | 36 | 58 | 18 | 19 | 6 | 56 | 4 | 36 | 0 | 0 | 105 | 11 | 5 | 17 | 1 | 16 | 1 | 2 | 1 | | | 3 | | | | | | | 0 | 0 |
| 11 | 20 | 61. | 29 | 46 | 19 | 19 | 92 | 7 | 26 | 6 | 22 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 19 | 36 | 92 | 19 | 29 | 9 | 42 | 8 | 28 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 62 | 21 | 29 | 15 | 92 | 12 | 19 | 12 | 40 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 92 | 21 | 29 | 16 | 36 | 10 | 62 | 9 | 44 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 62 | 25 | 92 | 20 | 36 | 9 | 19 | 7 | 39 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 92 | 19 | 19 | 13 | 36 | 10 | 62 | 10 | 48 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 210 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 6 | 62 | 29 | 11 | 92 | 9 | 62 | 8 | 93 | 8 | 64 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 9 | 11 | 36 | 10 | 92 | 9 | 45 | 6 | 64 | 0 | 0 | 7 | | | | | | | | | | | 0 | | | | | | | 4 | 0 |
| 4 | 2 | 62 | 92 | 13 | 45 | 10 | 31 | 6 | 62 | 5 | 66 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 3 | 0 |
| 4 | 16 | 62 | 92 | 13 | 2 | 10 | 31 | 7 | 45 | 5 | 65 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 2 | 62 | 92 | 40 | 29 | 12 | 62 | 7 | 9 | 3 | 38 | 110 | 0 | 4 | | | | | | | | | | | 10 | 76 | 2 | | | | | 0 | 0 |
| 5 | 21 | 62 | 92 | 38 | 26 | 19 | 62 | 5 | 16 | 3 | 35 | 0 | 0 | 26 | 11 | 1 | 21 | 1 | 2 | 1 | 1 | 1 | | | 15 | 76 | 3 | | | | | 0 | 0 |
| 6 | 4 | 62 | 29 | 47 | 92 | 20 | 62 | 4 | 56 | 3 | 26 | 40 | 0 | 7 | | | | | | | | | | | 118 | 51 | 4 | 50 | 4 | | | 0 | 0 |
| 6 | 18 | 62 | 26 | 32 | 56 | 25 | 29 | 15 | 97 | 10 | 18 | 40 | 0 | 193 | 2 | 5 | 11 | 4 | 7 | 3 | | | | | 9 | 51 | 1 | 50 | 1 | | | 0 | 0 |
| 7 | 2 | 62 | 29 | 51 | 56 | 21 | 18 | 13 | 58 | 6 | 9 | 0 | 0 | 101 | 11 | 4 | 16 | 3 | 17 | 1 | 2 | 1 | | | 5 | 50 | 1 | | | | | 0 | 0 |
| 7 | 16 | 62 | 58 | 57 | 56 | 12 | 29 | 11 | 26 | 10 | 10 | 0 | 0 | 206 | 11 | 5 | 16 | 5 | 15 | 1 | | | | | 14 | 50 | 3 | | | | | 0 | 0 |
| 8 | 6 | 62 | 58 | 43 | 56 | 11 | 29 | 9 | 26 | 9 | 28 | 0 | 0 | 69 | 22 | 4 | 11 | 3 | 17 | 3 | 2 | 1 | 16 | 1 | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 58 | 28 | 56 | 24 | 19 | 24 | 26 | 7 | 17 | 0 | 0 | 144 | 11 | 5 | 16 | 4 | 17 | 2 | | | | | 3 | 51 | 1 | | | | | 0 | 0 |
| 9 | 4 | 62 | 58 | 37 | 28 | 24 | 56 | 8 | 19 | 4 | 27 | 0 | 0 | 90 | 11 | 4 | 20 | 2 | 16 | 1 | 7 | 1 | 17 | 1 | 25 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 58 | 41 | 19 | 26 | 26 | 9 | 56 | 9 | 15 | 0 | 0 | 68 | 17 | 3 | 11 | 2 | 16 | 1 | 21 | 1 | 2 | 1 | 12 | 50 | 2 | 51 | 2 | | | 0 | 0 |

(Parts per billion)

**STATION LOCATION** DELAWARE RIVER AT

PHILADELPHIA, PENNSYLVANIA 12

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 11 | 10 | 61 | 11 | 21 | 7073 | 128 | 50 | 78 | 2 | 11 | 20 | 2 | 2 | 15 | 1 | 7 | 3 | 1 | 6 |
| 12 | 15 | 61 | 12 | 26 | 5720 | 112 | 39 | 73 | 2 | 8 | 14 | 3 | 1 | 10 | 0 | 5 | 3 | 1 | 6 |
| 2 | 20 | 62 | 3 | 19 | 6054 | 88 | 34 | 54 | 1 | 7 | 15 | 2 | 2 | 11 | 0 | 5 | 2 | 0 | 4 |
| 4 | 17 | 62 | 5 | 1 | 6872 | 66 | 24 | 42 | 1 | 7 | 7 | 2 | 1 | 4 | 0 | 2 | 3 | 0 | 4 |
| 5 | 17 | 62 | 5 | 25 | 6900 | 65 | 30 | 35 | 2 | 9 | 11 | 2 | 1 | 8 | 0 | 3 | 3 | 0 | 2 |
| 6 | 29 | 62 | 8 | 15 | 5121 | 167 | 71 | 96 | 2 | 16 | 24 | 5 | 3 | 16 | 0 | 10 | 9 | 1 | 9 |
| 8 | 20 | 62 | 8 | 27 | 5811# | 269 | 141 | 128 | 3 | 27 | 55 | 5 | 5 | 43 | 2 | 22 | 16 | 3 | 15 |

# ESTIMATED

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** PENNSYLVANIA

**MAJOR BASIN** NORTH ATLANTIC

**MINOR BASIN** DELAWARE SCHUYLKILL RIVERS

**STATION LOCATION** DELAWARE RIVER AT
PHILADELPHIA, PENNSYLVANIA 12

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 22.8 | 6.6 | 7.3 | 2.6 | 11 | 8.4 | 9.5 | .4 | 9 | 44 | 86 | 5 | 24 | 29 | .2 | - | 7000 |
| 10 | 9 | 61 | 22.2 | 6.9 | 7.3 | 3.0 | 13 | 7.2 | 8.5 | .5 | 15 | 44 | 70 | 5 | 72 | 28 | .1 | - | 16000 |
| 10 | 16 | 61 | 18.9 | 6.6 | 7.2 | 2.8 | 12 | 7.1 | 10.3 | .3 | 7 | 47 | 74 | 10 | 66 | 29 | .2 | - | - |
| 10 | 17 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 6000 |
| 10 | 23 | 61 | 16.7 | 7.3 | 7.1 | 2.1 | 11 | 8.0 | 11.5 | .3 | 14 | 42 | 76 | 5 | 62 | 32 | .3 | - | 20000 |
| 10 | 30 | 61 | 13.3 | 8.2 | 7.3 | 3.2 | 11 | 6.4 | 7.8 | .7 | 11 | 43 | 76 | 5 | 56 | 27 | 1.7 | - | - |
| 10 | 31 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 13000 |
| 11 | 6 | 61 | 18.3 | 6.4 | 7.0 | 2.2 | 7 | 7.3 | 9.5 | .5 | 10 | 41 | 78 | 5 | 25 | 38 | .6 | - | 9600 |
| 11 | 13 | 61 | 16.1 | 6.8 | 7.1 | 3.9 | 16 | 8.2 | 9.7 | 1.5 | 8 | 40 | 74 | 5 | 85 | 34 | .2 | - | - |
| 11 | 20 | 61 | 11.7 | 5.8 | 7.1 | 3.2 | 14 | 6.3 | 8.7 | 1.5 | 12 | 40 | 68 | 8 | 120 | 33 | .3 | - | 8000 |
| 11 | 27 | 61 | 11.7 | 10.2 | 7.2 | 3.6 | 9 | 7.0 | 9.6 | .6 | 13 | 39 | 64 | 5 | 200 | 29 | 1.0 | - | 7200 |
| 12 | 4 | 61 | 10.0 | 10.6 | 7.1 | 2.8 | 16 | 5.6 | 8.3 | 1.4 | 9 | 35 | 58 | 7 | 220 | 23 | .2 | - | 9200 |
| 12 | 11 | 61 | 7.8 | 11.0 | 7.0 | 3.4 | 12 | 7.4 | 9.3 | 1.4 | 12 | 28 | 50 | 5 | 320 | 29 | .2 | - | 9200 |
| 12 | 18 | 61 | 4.4 | 10.8 | 6.8 | 3.2 | 6 | 7.1 | 8.6 | 2.0 | 28 | 37 | 90 | 5 | 180 | 30 | .2 | - | 130 |
| 12 | 26 | 61 | 6.7 | 12.2 | 7.2 | - | 11 | 6.4 | 8.9 | .4 | 13 | 36 | 66 | 10 | 165 | 32 | .2 | - | *50 |
| 1 | 2 | 62 | 5.0 | 12.0 | 7.1 | 2.7 | 11 | 6.1 | 7.6 | .8 | 10 | 31 | 64 | 5 | 210 | 28 | .3 | 110 | *20 |
| 1 | 8 | 62 | 5.6 | 12.7 | 7.2 | 2.1 | 32 | 7.1 | 10.2 | 1.1 | 9 | 32 | 60 | 5 | 150 | 26 | .3 | 100 | - |
| 1 | 15 | 62 | 1.7 | 13.0 | 7.2 | 2.0 | 14 | 4.0 | 7.6 | .6 | 8 | 20 | 50 | 5 | 80 | 23 | .2 | 140 | 4600 |
| 1 | 22 | 62 | 3.9 | 11.2 | 7.2 | 2.7 | 11 | 5.1 | 6.7 | 1.4 | 9 | 24 | 46 | 5 | 60 | 24 | .2 | 130 | - |
| 1 | 29 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2800 |
| 1 | 30 | 62 | 5.0 | 12.6 | 7.2 | 2.7 | 7 | 4.9 | 6.6 | .6 | 9 | 30 | 52 | 5 | 70 | 24 | .3 | 140 | - |
| 2 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 32000 |
| 2 | 12 | 62 | 1.1 | 12.2 | 7.3 | 2.9 | 10 | 5.2 | 8.4 | 1.9 | 16 | 35 | 60 | 3 | 210 | 29 | .3 | 110 | - |
| 2 | 13 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 11000 |
| 2 | 19 | 62 | 2.8 | 12.2 | 7.2 | 2.6 | 6 | 2.2 | 4.0 | 2.3 | 11 | 37 | 58 | 6 | 220 | 18 | .3 | 140 | - |
| 2 | 26 | 62 | 3.0 | 11.6 | 7.2 | 3.0 | 12 | 4.6 | 8.8 | 1.6 | 13 | 39 | 66 | 8 | 140 | 26 | .3 | 200 | 8200 |
| 3 | 5 | 62 | 2.8 | 12.6 | 7.2 | 3.3 | 15 | 3.9 | 7.2 | .9 | 7 | 32 | 54 | 8 | 160 | 29 | .3 | 180 | - |
| 3 | 12 | 62 | 3.0 | 12.2 | 7.2 | 4.1 | 11 | 6.8 | 8.9 | 4.5 | 10 | 35 | 56 | 8 | 120 | 36 | .3 | 140 | 6400 |
| 3 | 19 | 62 | 4.0 | 11.8 | 7.2 | 4.0 | 11 | 6.8 | 9.1 | 2.0 | 9 | 27 | 46 | 18 | 100 | 23 | .3 | 190 | 3000 |
| 3 | 26 | 62 | 12.3 | 9.0 | 7.1 | 4.8 | 10 | 7.3 | 9.1 | .3 | 10 | 23 | 54 | 18 | 50 | 37 | .3 | 120 | 4700 |
| 4 | 2 | 62 | 12.0 | 10.6 | 7.2 | 4.4 | 10 | 7.0 | 8.0 | 2.5 | 6 | 26 | 46 | 18 | 80 | 19 | .3 | 130 | - |
| 4 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4400 |
| 4 | 9 | 62 | 12.3 | 10.6 | 7.1 | 4.0 | 9 | 6.4 | 8.3 | .7 | 7 | 23 | 44 | 25 | 95 | 25 | .2 | 130 | 5600 |
| 4 | 16 | 62 | 10.5 | 11.2 | 7.1 | 3.4 | 8 | 6.0 | 7.9 | 1.4 | 10 | 24 | 56 | 18 | 65 | 22 | .4 | 160 | 3200 |
| 4 | 23 | 62 | 11.0 | 10.4 | 7.3 | 4.4 | 9 | 5.9 | 8.3 | 1.3 | 9 | 29 | 52 | 5 | 85 | 28 | .3 | 150 | 5200 |
| 4 | 30 | 62 | 12.8 | 8.0 | 7.2 | 5.5 | 10 | 6.2 | 8.9 | .8 | 8 | 33 | 50 | 8 | 80 | 32 | .2 | 160 | 7600 |
| 5 | 7 | 62 | 14.0 | 7.8 | 7.2 | 4.6 | 16 | 7.8 | 9.0 | .7 | 9 | 36 | 60 | 8 | 65 | 38 | .3 | 220 | - |
| 5 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4100 |
| 5 | 14 | 62 | 16.0 | 7.2 | 7.2 | 5.1 | 8 | 7.7 | 9.2 | 1.6 | 8 | 36 | 56 | 8 | 115 | 26 | .4 | 140 | 400 |

PENNSYLVANIA

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** NORTH ATLANTIC

**MINOR BASIN** DELAWARE SCHUYLKILL RIVERS

**STATION LOCATION** DELAWARE RIVER AT
PHILADELPHIA, PENNSYLVANIA

12

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORM per 100 m |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 21 | 62 | 19.3 | 6.2 | 7.2 | 5.3 | 9 | 8.8 | 10.2 | .1 | 7 | 44 | 64 | 7 | 70 | 36 | .3 | 180 | |
| 5 | 28 | 62 | 21.0 | 4.8 | 7.1 | 6.0 | 11 | 9.0 | 11.1 | 1.5 | 5 | 43 | 64 | 18 | 55 | 22 | .3 | 170 | |
| 6 | 4 | 62 | 23.0 | 3.4 | 7.1 | 7.8 | 15 | 8.0 | 10.0 | 1.4 | 13 | 44 | 78 | 23 | 55 | 28 | .3 | 130 | |
| 6 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 77 |
| 6 | 11 | 62 | 23.3 | 4.0 | 7.3 | 6.3 | 9 | 8.6 | 11.0 | .7 | 13 | 50 | 76 | 8 | 50 | 37 | .2 | 180 | |
| 6 | 18 | 62 | 23.0 | 4.2 | 7.1 | 5.6 | 12 | 9.2 | 11.7 | 1.4 | 15 | 47 | 68 | 20 | 55 | 32 | .4 | 160 | |
| 6 | 25 | 62 | 25.0 | 3.0 | 7.3 | 6.6 | 13 | 10.0 | 12.8 | 1.1 | 11 | 48 | 70 | 25 | 33 | 36 | .8 | 100 | 350 |
| 7 | 2 | 62 | 25.2 | 4.8 | 7.3 | 5.0 | 7 | 8.8 | 10.2 | 1.1 | 14 | 48 | 68 | 25 | 50 | 32 | .4 | 220 | |
| 7 | 9 | 62 | 25.0 | 5.4 | 7.2 | 4.8 | 12 | 9.1 | 11.9 | 1.0 | 16 | 47 | 72 | 15 | 40 | 31 | .3 | 170 | |
| 7 | 10 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *7 |
| 7 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 7 | 19 | 62 | 27.0 | 5.2 | 7.2 | 6.2 | 20 | 2.4 | 7.8 | .5 | 9 | 49 | 78 | 12 | 40 | 32 | .3 | 108 | |
| 7 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 7 | 26 | 62 | 25.0 | 6.0 | 7.2 | 5.5 | 12 | 2.6 | 8.4 | .9 | 14 | 54 | 70 | 13 | 50 | 33 | .3 | 120 | - |
| 7 | 31 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 50 |
| 8 | 2 | 62 | 23.9 | 5.8 | 7.2 | 4.9 | 9 | .2 | 6.4 | .7 | 17 | 49 | 76 | 17 | 40 | 34 | .2 | 119 | - |
| 8 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 240 |
| 8 | 9 | 62 | 25.8 | 5.0 | 7.2 | 5.0 | 12 | 3.0 | 6.6 | 1.0 | [illegible] | 63 | 80 | [illegible] | 40 | 30 | .3 | 122 | - |
| 8 | 13 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 400 |
| 8 | 16 | 62 | 23.9 | 5.8 | 7.3 | 4.4 | 13 | 3.0 | 6.8 | 1.1 | [illegible] | 46 | [illegible] | [illegible] | 41 | 34 | .2 | 116 | - |
| 8 | 21 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 230 |
| 8 | 23 | 62 | 23.2 | 4.0 | 7.1 | 3.8 | 13 | 3.6 | 8.2 | 1.2 | [illegible] | 45 | 76 | [illegible] | [illegible] | [illegible] | .4 | 96 | - |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 8 | 30 | 62 | 23.9 | 5.8 | 7.1 | 4.9 | 13 | 2.8 | 7.4 | 1.1 | 11 | [illegible] | [illegible] | [illegible] | [illegible] | 24 | .2 | 100 | - |
| 9 | 4 | 62 | 24.2 | 4.0 | 7.0 | 4.0 | 9 | 3.2 | 7.2 | .6 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .2 | 91 | 770 |
| 9 | 11 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 150 |
| 9 | 13 | 62 | 22.0 | 5.4 | 7.1 | 3.9 | 12 | 3.0 | 7.0 | 1.2 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .3 | 101 | - |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 9 | 20 | 62 | 21.8 | 5.6 | 7.2 | 3.9 | 17 | 2.5 | 6.8 | 1.5 | [illegible] | [illegible] | 84 | [illegible] | [illegible] | [illegible] | [illegible] | 111 | - |
| 9 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 87 |
| 9 | 27 | 62 | 19.3 | 5.0 | 7.5 | 2.8 | 17 | 2.2 | 7.0 | .8 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | 91 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Trenton, New Jersey
Operated by U.S. Geological Survey

STATE Pennsylvania

MAJOR BASIN North Atlantic

MINOR BASIN Delaware-Schuylkill Rivers

STATION LOCATION Delaware River at
Philadelphia, Pennsylvania

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.170 | 2.630 | 6.650 | 5.220 | 7.000 | 24.100 | 31.400 | 9.000 | 3.320 | 2.810 | 2.220 | 2.790 |
| 2 | 2.960 | 3.200 | 5.900 | 4.900 | 6.880 | 16.400 | 58.600 | 9.900 | 3.410 | 2.690 | 2.320 | 3.380 |
| 3 | 3.080 | 2.690 | 5.700 | 4.560 | 5.980 | 13.900 | 51.000 | 11.000 | 3.720 | 2.510 | 2.380 | 3.420 |
| 4 | 3.080 | 2.690 | 5.140 | 4.560 | 6.140 | 13.200 | 39.900 | 10.300 | 3.470 | 2.450 | 2.320 | 2.510 |
| 5 | 3.140 | 3.020 | 4.740 | 5.620 | 6.700 | 11.100 | 25.900 | 9.500 | 3.290 | 2.320 | 2.320 | 2.260 |
| 6 | 3.170 | 3.290 | 4.700 | 5.980 | 6.800 | 10.000 | 21.200 | 8.450 | 4.040 | 2.300 | 2.400 | 2.380 |
| 7 | 2.990 | 3.590 | 4.630 | 22.600 | 7.160 | 9.260 | 20.200 | 7.700 | 4.420 | 2.320 | 3.050 | 2.630 |
| 8 | 2.930 | 5.900 | 4.380 | 36.200 | 6.840 | 8.550 | 30.100 | 7.040 | 3.620 | 2.280 | 3.960 | 2.480 |
| 9 | 2.900 | 5.780 | 4.350 | 39.300 | 7.000 | 8.600 | 48.100 | 7.160 | 3.260 | 2.280 | 4.100 | 2.380 |
| 10 | 2.870 | 4.980 | 4.490 | 26.200 | 7.000 | 8.700 | 40.500 | 7.400 | 3.200 | 2.200 | 4.460 | 2.260 |
| 11 | 2.840 | 4.630 | 4.420 | 19.600 | 6.400 | 9.380 | 32.500 | 7.000 | 3.050 | 2.150 | 4.780 | 2.080 |
| 12 | 2.750 | 4.140 | 4.600 | 14.100 | 5.020 | 21.800 | 26.700 | 6.800 | 3.230 | 2.510 | 4.100 | 2.140 |
| 13 | 2.750 | 3.320 | 5.500 | 11.600 | 4.740 | 35.400 | 25.800 | 6.550 | 3.960 | 2.280 | 3.380 | 2.410 |
| 14 | 2.900 | 3.200 | 5.940 | 10.500 | 5.060 | 28.500 | 24.300 | 5.820 | 4.420 | 2.320 | 3.230 | 2.290 |
| 15 | 2.840 | 3.720 | 5.140 | 9.100 | 5.420 | 30.100 | 23.300 | 5.180 | 4.100 | 2.570 | 2.780 | 2.230 |
| 16 | 2.870 | 5.140 | 4.520 | 12.800 | 5.140 | 28.400 | 21.300 | 5.500 | 3.790 | 2.480 | 2.750 | 2.290 |
| 17 | 2.990 | 6.100 | 3.820 | 19.200 | 4.940 | 21.300 | 19.100 | 5.580 | 3.500 | 2.280 | 2.720 | 2.600 |
| 18 | 2.720 | 6.550 | 5.260 | 18.600 | 5.060 | 18.800 | 17.400 | 5.580 | 3.290 | 2.250 | 2.690 | 2.260 |
| 19 | 2.810 | 5.940 | 8.500 | 13.500 | 5.100 | 17.300 | 16.000 | 5.700 | 3.110 | 2.380 | 2.690 | 2.350 |
| 20 | 2.750 | 5.660 | 9.320 | 11.200 | 4.660 | 16.600 | 15.400 | 5.340 | 3.170 | 2.600 | 2.570 | 2.920 |
| 21 | 2.990 | 4.980 | 11.100 | 9.950 | 4.560 | 18.000 | 15.000 | 4.700 | 3.200 | 2.570 | 2.480 | 2.510 |
| 22 | 3.110 | 4.780 | 11.000 | 8.700 | 4.740 | 26.100 | 13.800 | 4.320 | 3.170 | 2.450 | 2.600 | 2.320 |
| 23 | 2.900 | 4.660 | 10.000 | 9.380 | 4.980 | 25.300 | 12.800 | 4.180 | 2.630 | 2.570 | 3.020 | 2.290 |
| 24 | 2.660 | 4.980 | 8.500 | 10.000 | 11.900 | 26.700 | 12.000 | 4.420 | 2.810 | 3.170 | 2.720 | 2.200 |
| 25 | 2.600 | 8.450 | 8.000 | 10.800 | 15.000 | 25.400 | 11.700 | 4.560 | 3.260 | 3.320 | 2.480 | 1.960 |
| 26 | 3.110 | 9.560 | 7.300 | 10.300 | 14.000 | 22.600 | 11.300 | 4.460 | 3.290 | 2.870 | 2.380 | 1.910 |
| 27 | 3.080 | 11.500 | 6.700 | 9.320 | 26.300 | 21.400 | 10.200 | 4.040 | 3.200 | 2.630 | 2.350 | 2.480 |
| 28 | 2.900 | 9.500 | 6.600 | 10.500 | 27.200 | 21.100 | 9.740 | 3.530 | 3.320 | 2.570 | 3.440 | 2.980 |
| 29 | 2.960 | 8.400 | 7.080 | 9.850 |  | 20.700 | 9.200 | 3.380 | 3.110 | 2.420 | 3.410 | 4.700 |
| 30 | 2.630 | 7.300 | 6.550 | 9.620 |  | 19.800 | 8.850 | 3.230 | 2.840 | 2.320 | 3.930 | 5.580 |
| 31 | 2.540 |  | 5.820 | 8.300 |  | 21.200 |  | 3.230 |  | 2.300 | 3.290 |  |

| DATE OF SAMPLE | | | ALGAE (Number per milliliter) | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 11 | 27 | 61 | 10000 | 0 | 60 | 560 | 0 | 40 | 0 | 3170 | 6210 | | 20 | 2400 | 69 | 5 | 92 | 4 | 73 | 4 | 88 | 3 | 68 | 2 | 87 | 2 | 81 | 2 | 38 | 2 | 82 | 1 | 84 | 1 |
| 12 | 18 | 61 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 190 | | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 290 | | 20 | 250 | | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 800 | 0 | 70 | 70 | 0 | 70 | 0 | 20 | 590 | | 20 | 160 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 800 | 0 | 0 | 0 | 0 | 70 | 0 | 90 | 610 | | 0 | 0 | 77 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 300 | 0 | 0 | 0 | 0 | 40 | 20 | 0 | 200 | | 20 | 110 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 1700 | 0 | 0 | 40 | 40 | 40 | 80 | 120 | 1330 | | 40 | 330 | 92 | 2 | 84 | 1 | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 1400 | 0 | 20 | 0 | 20 | 0 | 0 | 60 | 1260 | | 0 | 410 | 84 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 13300 | 0 | 40 | 40 | 80 | 210 | 80 | 910 | 11920 | | 330 | 2190 | 92 | 6 | 82 | 3 | 81 | 3 | 84 | 3 | 87 | 3 | 91 | 2 | 69 | 2 | 73 | 2 | 68 | 2 | | |
| 4 | 16 | 62 | 600 | 0 | 0 | 20 | 0 | 360 | 50 | 0 | 160 | | 20 | 420 | 57 | 2 | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 9800 | 0 | 40 | 540 | 60 | 720 | 130 | 1040 | 7270 | | 100 | 1410 | 92 | 6 | 68 | 3 | 51 | 3 | 88 | 2 | 81 | 2 | 25 | 1 | 71 | 1 | 77 | 1 | | | | |
| 5 | 21 | 62 | 33700 | 1650 | 1860 | 14010 | 20 | 1100 | 250 | 9120 | 5740 | | 1980 | 6200 | 68 | 6 | 40 | 5 | 71 | 5 | 38 | 5 | 92 | 4 | 17 | 4 | 2 | 4 | 81 | 4 | 24 | 4 | 45 | 4 |
| 6 | 11 | 62 | 171000 | 720 | 5440 | 131240 | 0 | 1770 | 0 | 24140 | 7640 | | 6160 | 8150 | 40 | 8 | 24 | 8 | 38 | 8 | 68 | 8 | 44 | 7 | 17 | 6 | 45 | 5 | 30 | 5 | 31 | 5 | 92 | 5 |
| 6 | 18 | 62 | 81100 | 2190 | 4140 | 49120 | 0 | 550 | 630 | 13630 | 10800 | | 4260 | 9750 | 38 | 7 | 68 | 7 | 24 | 7 | 40 | 6 | 88 | 5 | 17 | 5 | 92 | 5 | 30 | 5 | 45 | 4 | 71 | 4 |
| 7 | 2 | 62 | 18500 | 250 | 550 | 11180 | 0 | 1010 | 250 | 1600 | 3630 | | 460 | 1820 | 38 | 6 | 40 | 5 | 88 | 4 | 68 | 4 | 92 | 3 | 30 | 2 | 17 | 2 | 51 | 2 | 31 | 2 | | |
| 7 | 16 | 62 | 20100 | 250 | 0 | 11530 | 40 | 2650 | 80 | 870 | 4720 | | 460 | 790 | 38 | 6 | 88 | 5 | 51 | 5 | 25 | 4 | 40 | 4 | 29 | 3 | 68 | 3 | 73 | 2 | 92 | 2 | 44 | 2 |
| 8 | 6 | 62 | 6000 | 70 | 0 | 2050 | 0 | 540 | 20 | 500 | 2880 | | 290 | 1820 | 88 | 4 | 25 | 3 | 40 | 2 | 51 | 2 | 87 | 2 | 68 | 2 | 92 | 1 | 31 | 1 | 26 | 1 | | |
| 8 | 20 | 62 | 22000 | 330 | 120 | 7780 | 0 | 10490 | 80 | 910 | 2280 | | 170 | 580 | 51 | 7 | 38 | 6 | 68 | 3 | 88 | 3 | 25 | 3 | 40 | 3 | 87 | 2 | 35 | 2 | 3 | 1 | 92 | 1 |
| 9 | 4 | 62 | 8100 | 210 | 0 | 4430 | 0 | 410 | 0 | 540 | 2530 | | 120 | 790 | 38 | 4 | 88 | 4 | 44 | 3 | 51 | 2 | 68 | 2 | 25 | 2 | 40 | 2 | 3 | 1 | 79 | 1 | 92 | 1 |
| 9 | 17 | 62 | 2100 | 0 | 0 | 1600 | 0 | 20 | 0 | 70 | 360 | | 90 | 2000 | | | | | | | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** NEW JERSEY
**MAJOR BASIN** NORTH ATLANTIC
**MINOR BASIN** DELAWARE RIVER - ZONE #2
**STATION LOCATION** DELAWARE RIVER AT
TRENTON, NEW JERSEY 100

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | | |
| | | | | | | | | | | | | | | | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA *(Identifiable) Number per ml.* | NUMBER PER LITER | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | NUMBER PER LITER | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| 11 | 27 | 61 | 62 | 43 | 92 | 16 | 2 | 10 | 70 | 3 | 28 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 62 | 22 | 92 | 15 | 45 | 11 | 31 | 5 | 47 | 0 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 92 | 13 | 2 | 11 | 62 | 10 | 70 | 7 | 59 | 20 | 0 | 8 | | | | | | | | | | | 1 | | | | | | | 0 | 2 |
| 1 | 15 | 62 | 2 | 14 | 62 | 10 | 92 | 9 | 93 | 9 | 58 | 380 | 0 | 7 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 2 | 5 | 62 | 92 | 14 | 93 | 13 | 9 | 10 | 2 | 8 | 55 | 410 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 2 | 19 | 62 | 93 | 13 | 92 | 12 | 36 | 10 | 9 | 8 | 57 | 200 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 93 | 13 | 92 | 9 | 16 | 7 | 36 | 6 | 65 | 80 | 0 | 5 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 45 | 15 | 31 | 9 | 93 | 9 | 2 | 9 | 58 | 40 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 4 | 2 | 62 | 92 | 35 | 62 | 17 | 36 | 8 | 31 | 4 | 46 | 120 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 2 | 24 | 93 | 9 | 92 | 8 | 31 | 6 | 53 | 0 | 0 | 7 | | | | | | | | | | | 0 | | | | | | | 0 | 3 |
| 5 | 7 | 62 | 92 | 76 | 45 | 5 | 31 | 4 | 70 | 2 | 13 | 2070 | 10 | 11 | 15 | 1 | 6 | 1 | | | | | | | 1 | | | | | | | 1 | 0 |
| 5 | 21 | 62 | 92 | 24 | 31 | 23 | 2 | 8 | 26 | 6 | 39 | 250 | 0 | 43 | 6 | 2 | 15 | 2 | 11 | 1 | | | | | 3 | | | | | | | 6 | 5 |
| 6 | 11 | 62 | 27 | 27 | 92 | 21 | 2 | 10 | 62 | 7 | 35 | 40 | 0 | 33 | 2 | 1 | 6 | 1 | 15 | 1 | 22 | 1 | | | 0 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 26 | 18 | 92 | 15 | 62 | 11 | 70 | 11 | 45 | 0 | 0 | 21 | 2 | 1 | 15 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 92 | 21 | 70 | 20 | 70 | 15 | 26 | 13 | 31 | 0 | 0 | 90 | 2 | 4 | 22 | 2 | 20 | 2 | | | | | 1 | | | | | | | 0 | 1 |
| 7 | 16 | 62 | 70 | 34 | 70 | 14 | 92 | 8 | 2 | 6 | 38 | 40 | 0 | 36 | 18 | 2 | 20 | 2 | | | | | | | 1 | | | | | | | 0 | 1 |
| 8 | 6 | 62 | 70 | 31 | 70 | 22 | 64 | 9 | 26 | 6 | 32 | 0 | 0 | 130 | 15 | 4 | 13 | 3 | 2 | 2 | 18 | 1 | 22 | 1 | 2 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 26 | 20 | 70 | 18 | 64 | 9 | 62 | 7 | 46 | 0 | 0 | 21 | 15 | 2 | 22 | 1 | | | | | | | 1 | | | | | | | 3 | 2 |
| 9 | 4 | 62 | 70 | 24 | 64 | 14 | 16 | 7 | 62 | 5 | 50 | 0 | 0 | 28 | 15 | 3 | | | | | | | | | 0 | | | | | | | 6 | 0 |
| 9 | 17 | 62 | 64 | 35 | 71 | 20 | 16 | 8 | 70 | 4 | 33 | 0 | 0 | 24 | 15 | 2 | 22 | 1 | | | | | | | 0 | | | | | | | 0 | * |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** NEW JERSEY
**MAJOR BASIN** NORTH ATLANTIC
**MINOR BASIN** DELAWARE RIVER - ZONE #2
**STATION LOCATION** DELAWARE RIVER AT
TRENTON, NEW JERSEY

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 11 | 20 | 61 | 11 | 30 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 5 | 31 | 6 | 38 | 8 | | | | | | |
| 11 | 27 | 61 | 12 | 6 | 2 | 2 | 0 | 1 | 2 | 2 | 75 | 8 | 42 | 6 | 117 | 10 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 4 | 16 | 5 | 23 | 6 | | | | | | |
| 12 | 18 | 61 | 12 | 29 | 0 | 1 | 0 | 1 | 0 | 1 | 40 | 5 | 29 | 5 | 69 | 7 | | | | | | |
| 12 | 26 | 61 | 1 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 28 | 5 | 27 | 5 | 55 | 7 | | | | | | |
| 1 | 2 | 62 | 1 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 4 | 15 | 5 | 22 | 6 | | | | | | |
| 1 | 8 | 62 | 1 | 16 | 1 | 2 | 0 | 1 | 1 | 2 | 94 | 9 | 34 | 6 | 128 | 12 | | | | | | |
| 1 | 15 | 62 | 1 | 24 | 0 | 1 | 0 | 1 | 0 | 1 | 16 | 4 | 18 | 5 | 34 | 7 | | | | | | |
| 1 | 30 | 62 | 2 | 8 | 0 | 1 | 0 | 1 | 0 | 1 | 62 | 9 | 29 | 5 | 91 | 10 | | | | | | |
| 2 | 5 | 62 | 2 | 13 | 0 | 0 | 0 | 1 | 0 | 1 | 24 | 5 | 19 | 5 | 43 | 7 | | | | | | |
| 2 | 13 | 62 | 2 | 20 | 0 | 0 | 1 | 1 | 1 | 1 | 22 | 4 | 19 | 5 | 41 | 6 | | | | | | |
| 2 | 19 | 62 | 3 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 18 | 4 | 29 | 5 | 47 | 6 | | | | | | |
| 2 | 26 | 62 | 3 | 12 | 1 | 1 | 0 | 1 | 1 | 1 | 207 | 7 | 121 | 7 | 308 | 10 | | | | | | |
| 3 | 5 | 62 | 3 | 19 | 0 | 0 | 0 | 1 | 0 | 1 | 23 | 4 | 34 | 5 | 57 | 6 | | | | | | |
| 3 | 12 | 62 | 3 | 22 | 1 | 1 | 0 | 1 | 1 | 1 | 69 | 7 | 37 | 5 | 106 | 9 | | | | | | |
| 3 | 19 | 62 | 3 | 29 | 1 | 1 | 0 | 1 | 1 | 1 | 33 | 5 | 22 | 5 | 55 | 7 | | | | | | |
| 3 | 26 | 62 | 4 | 19 | — | — | — | — | — | — | 26 | 6 | 17 | 6 | 43 | 8 | | | | | | |
| 4 | 2 | 62 | 4 | 12 | 4 | 2 | 1 | 1 | 5 | 2 | 74 | 8 | 21 | 5 | 95 | 13 | | | | | | |
| 4 | 9 | 62 | 4 | 23 | 1 | 1 | 0 | 1 | 1 | 1 | 41 | 7 | 27 | 6 | 68 | 9 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | 0 | 1 | 0 | 0 | 0 | 1 | 10 | 4 | 19 | 5 | 29 | 6 | | | | | | |
| 4 | 23 | 62 | 5 | 29 | 0 | 1 | 0 | 1 | 0 | 1 | 12 | 5 | 24 | 6 | 36 | 8 | | | | | | |
| 4 | 30 | 62 | 5 | 25 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 7 | 20 | 8 | 27 | 10 | | | | | | |
| 5 | 7 | 62 | 6 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 5 | 15 | 6 | 19 | 7 | | | | | | |
| 5 | 14 | 62 | 6 | 18 | 2 | 1 | 1 | 1 | 3 | 1 | 1 | 5 | 11 | 6 | 12 | 7 | | | | | | |
| 5 | 21 | 62 | 6 | 22 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 3 | 13 | 4 | 16 | 5 | | | | | | |
| 5 | 28 | 62 | 6 | 30 | 1 | 1 | 1 | 1 | 2 | 1 | 8 | 3 | 13 | 4 | 21 | 5 | | | | | | |
| 6 | 11 | 62 | 7 | 11 | 1 | 2 | 0 | 1 | 1 | 2 | 0 | 12 | 7 | 8 | 7 | 14 | | | | | | |
| 6 | 18 | 62 | 7 | 16 | 0 | 1 | 0 | 0 | 0 | 1 | 9 | 6 | 7 | 7 | 16 | 9 | | | | | | |
| 6 | 25 | 62 | 7 | 18 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 5 | 120 | 9 | 126 | 10 | | | | | | |
| 7 | 2 | 62 | 8 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 10 | 10 | 7 | 10 | 12 | | | | | | |
| 7 | 9 | 62 | 8 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 8 | 3 | 11 | 4 | | | | | | |
| 7 | 16 | 62 | 8 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 13 | 6 | 19 | 7 | | | | | | |
| 8 | 6 | 62 | 8 | 23 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 6 | 7 | 7 | 8 | 9 | | | | | | |
| 8 | 13 | 62 | 8 | 23 | 0 | 1 | 1 | 1 | 1 | 1 | 4 | 5 | 13 | 6 | 17 | 8 | | | | | | |
| 8 | 20 | 62 | 9 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 3 | 4 | 3 | 4 | 4 | | | | | | |
| 8 | 27 | 62 | 9 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 6 | 14 | 7 | 16 | 9 | | | | | | |
| 9 | 4 | 62 | 9 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 9 | 6 | 9 | 9 | | | | | | |
| 9 | 10 | 62 | 9 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 | 7 | 7 | 11 | 9 | | | | | | |
| 9 | 17 | 62 | 10 | 10 | 0 | 0 | 1 | 1 | 1 | 1 | 4 | 5 | 18 | 7 | 22 | 8 | | | | | | |

**MINOR BASIN** DELAWARE RIVER ZONE #2

**STATION LOCATION** DELAWARE RIVER AT

TRENTON, NEW JERSEY 100

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 11 | 20 | 61 | 9.0 | - | 7.6 | - | - | - | - | - | 5 | 36 | 52 | 25 | 10 | 15 | .2 | - | - |
| 11 | 27 | 61 | 8.0 | - | 7.3 | - | - | - | - | - | 4 | 28 | 50 | 60 | 56 | 30 | .3 | - | 3700 |
| 12 | 4 | 61 | 5.0 | - | 7.2 | - | - | - | - | - | 7 | 29 | 50 | 25 | 6 | 20 | .3 | - | 130 |
| 12 | 11 | 61 | 4.0 | - | 7.7 | - | - | - | - | - | - | 42 | 54 | 15 | 6 | 17 | - | - | 2400 |
| 12 | 18 | 61 | 3.0 | 13.2 | 7.2 | - | 53 | - | - | - | 10 | 33 | 60 | 25 | 13 | 20 | 1.1 | - | 7400 |
| 12 | 26 | 61 | 2.0 | 12.2 | 7.5 | - | 28 | - | - | - | 6 | 28 | 44 | 15 | 2 | 15 | .4 | - | 400 |
| 12 | 27 | 61 | - | 12.2 | - | 1.9 | 3 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 2 | 62 | 2.0 | 13.1 | 7.1 | - | 9 | - | - | - | - | 35 | 46 | 15 | 4 | 20 | - | - | 140 |
| 1 | 8 | 62 | 4.0 | - | 7.5 | - | - | - | - | - | 10 | 37 | 70 | 200 | 205 | 55 | - | - | 4700 |
| 1 | 10 | 62 | - | 12.7 | - | 2.9 | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 15 | 62 | 2.0 | - | 7.4 | - | - | - | - | - | 12 | 29 | 64 | 20 | 10 | 31 | .3 | - | 1700 |
| 1 | 17 | 62 | - | 11.8 | - | 3.2 | 10 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 22 | 62 | 2.0 | - | 7.4 | - | - | - | - | - | 10 | 40 | 40 | 20 | 7 | - | .3 | - | 1300 |
| 1 | 24 | 62 | - | 15.3 | - | 6.4 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 29 | 62 | 3.0 | - | 7.1 | - | - | - | - | - | - | 13 | 44 | 15 | 7 | 20 | - | - | 440 |
| 1 | 31 | 62 | - | 12.4 | - | 2.4 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 5 | 62 | 3.0 | - | 7.5 | - | - | - | - | - | 8 | 36 | 60 | 15 | 4 | 26 | .3 | - | - |
| 2 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 570 |
| 2 | 7 | 62 | - | 11.9 | - | 3.3 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 13 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 490 |
| 2 | 14 | 62 | - | 10.4 | - | .5 | 2 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 15 | 62 | 1.0 | - | 7.4 | - | - | - | - | - | 8 | 32 | 54 | 15 | 7 | 15 | .5 | - | - |
| 2 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 400 |
| 2 | 21 | 62 | - | 12.1 | - | 3.3 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 28 | 62 | - | 11.5 | - | 6.5 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 5 | 62 | 3.5 | 12.3 | 7.5 | 3.3 | - | - | - | - | 15 | 32 | 66 | 20 | 111 | 20 | 4.2 | 125 | 3000 |
| 3 | 12 | 62 | 6.5 | 11.8 | 7.3 | 3.9 | 2 | - | - | - | 8 | 29 | 50 | 40 | 33 | 30 | 1.2 | 140 | 600 |
| 3 | 19 | 62 | 5.0 | 11.4 | 7.1 | 1.9 | - | - | - | - | 12 | 32 | 48 | 20 | 13 | 25 | .5 | - | 1500 |
| 3 | 26 | 62 | 7.0 | 11.0 | 7.2 | 1.9 | 3 | - | - | - | 10 | 32 | 48 | 25 | 17 | 20 | .1 | - | 1500 |
| 4 | 2 | 62 | 10.0 | - | 7.3 | - | - | - | - | - | 4 | 21 | - | 110 | 80 | - | 1.0 | 78 | 3100 |
| 4 | 4 | 62 | - | 11.8 | - | 2.8 | 6 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 9 | 62 | 9.0 | 11.7 | 7.2 | 2.5 | - | - | - | - | 30 | 18 | 30 | 35 | 30 | 30 | .4 | - | 5400 |
| 4 | 16 | 62 | 8.0 | 11.4 | 7.3 | 1.8 | 10 | - | - | - | 5 | 29 | 44 | 20 | 10 | 16 | .8 | 60 | 680 |
| 4 | 23 | 62 | 13.0 | - | 7.4 | - | 13 | - | - | - | 21 | 33 | 42 | 20 | 10 | - | .6 | - | 640 |
| 4 | 30 | 62 | 20.0 | - | 7.7 | 2.1 | 9 | - | - | - | 20 | 40 | 72 | 15 | 8 | 23 | .2 | - | 820 |
| 5 | 7 | 62 | 18.0 | 10.0 | 7.4 | 1.0 | 15 | - | - | - | 4 | 36 | 46 | 20 | 6 | 30 | .3 | - | 1300 |
| 5 | 14 | 62 | 16.0 | 7.8 | 8.6 | 4.6 | 18 | - | - | - | 8 | 42 | 52 | 20 | 6 | 40 | .1 | 110 | 300 |
| 5 | 21 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 16000 |
| 5 | 28 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2800 |

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** NORTH ATLANTIC

**MINOR BASIN** DELAWARE RIVER ZONE #2

**STATION LOCATION** DELAWARE RIVER AT

TRENTON, NEW JERSEY 100

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 4 | 62 | 24.0 | 7.1 | 8.5 | 2.0 | 29 | - | - | - | 5 | 48 | 66 | 40 | 14 | 35 | .5 | 130 | 17000 |
| 6 | 14 | 62 | 21.5 | 8.2 | 7.5 | 2.7 | 15 | - | - | - | 20 | 62 | 64 | 45 | 23 | - | 1.0 | - | - |
| 6 | 18 | 62 | 25.0 | 6.4 | 8.2 | 1.6 | 17 | - | - | - | - | 43 | 70 | 40 | 10 | 45 | .2 | - | 170 |
| 6 | 25 | 62 | 25.0 | 10.3 | 7.7 | 1.7 | - | - | - | - | 10 | 50 | 110 | 0 | *25 | 28 | .0 | 136 | 3700 |
| 7 | 2 | 62 | 25.0 | - | 7.6 | - | - | - | - | - | 10 | 48 | 88 | 5 | *25 | 27 | .0 | 125 | 120 |
| 7 | 9 | 62 | 25.0 | 10.1 | 8.8 | 5.0 | 23 | - | - | - | 12 | 50 | 66 | 25 | 8 | 44 | .6 | 84 | *20 |
| 7 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *20 |
| 8 | 13 | 62 | - | - | - | - | - | - | - | - | 8 | 48 | - | 5 | 25 | - | - | 99 | - |
| 8 | 20 | 62 | - | - | - | - | - | - | - | - | 9 | - | - | 5 | 25 | - | - | 100 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Trenton Water Works Intake
Operated by U.S. Geological Survey

STATE New Jersey

MAJOR BASIN North Atlantic

MINOR BASIN Delaware River-Zone 2

STATION LOCATION Delaware River at
Trenton, New Jersey

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.170 | 2.630 | 6.650 | 5.220 | 7.000 | 24.100 | 31.400 | 9.000 | 3.320 | 2.810 | 2.220 | 2.790 |
| 2 | 2.960 | 3.200 | 5.900 | 4.900 | 6.880 | 16.400 | 58.600 | 9.900 | 3.410 | 2.690 | 2.320 | 3.380 |
| 3 | 3.080 | 2.690 | 5.700 | 4.560 | 5.980 | 13.900 | 51.000 | 11.000 | 3.720 | 2.510 | 2.380 | 3.420 |
| 4 | 3.080 | 2.690 | 5.140 | 4.560 | 6.140 | 13.200 | 39.900 | 10.300 | 3.470 | 2.450 | 2.320 | 2.510 |
| 5 | 3.140 | 3.020 | 4.740 | 5.620 | 6.700 | 11.100 | 25.900 | 9.500 | 3.290 | 2.320 | 2.320 | 2.260 |
| 6 | 3.170 | 3.290 | 4.700 | 5.980 | 6.800 | 10.000 | 21.200 | 8.450 | 4.040 | 2.300 | 2.400 | 2.380 |
| 7 | 2.990 | 3.590 | 4.630 | 22.600 | 7.160 | 9.260 | 20.200 | 7.700 | 4.420 | 2.320 | 3.050 | 2.630 |
| 8 | 2.930 | 5.900 | 4.380 | 36.200 | 6.840 | 8.550 | 30.100 | 7.040 | 3.620 | 2.280 | 3.960 | 2.480 |
| 9 | 2.900 | 5.780 | 4.350 | 39.300 | 7.000 | 8.600 | 48.100 | 7.160 | 3.260 | 2.280 | 4.100 | 2.380 |
| 10 | 2.870 | 4.980 | 4.490 | 26.200 | 7.000 | 8.700 | 40.500 | 7.400 | 3.200 | 2.200 | 4.460 | 2.260 |
| 11 | 2.840 | 4.630 | 4.420 | 19.600 | 6.400 | 9.380 | 32.500 | 7.000 | 3.050 | 2.150 | 4.780 | 2.080 |
| 12 | 2.750 | 4.140 | 4.600 | 14.100 | 5.020 | 21.800 | 26.700 | 6.800 | 3.230 | 2.510 | 4.100 | 2.140 |
| 13 | 2.750 | 3.320 | 5.500 | 11.600 | 4.740 | 35.400 | 25.800 | 6.550 | 3.960 | 2.280 | 3.380 | 2.410 |
| 14 | 2.900 | 3.200 | 5.940 | 10.500 | 5.060 | 28.500 | 24.300 | 5.820 | 4.420 | 2.320 | 3.230 | 2.290 |
| 15 | 2.840 | 3.720 | 5.140 | 9.100 | 5.420 | 30.100 | 23.300 | 5.180 | 4.100 | 2.570 | 2.780 | 2.230 |
| 16 | 2.870 | 5.140 | 4.520 | 12.800 | 5.140 | 28.400 | 21.300 | 5.500 | 3.790 | 2.480 | 2.750 | 2.290 |
| 17 | 2.990 | 6.100 | 3.820 | 19.200 | 4.940 | 21.300 | 19.100 | 5.580 | 3.500 | 2.280 | 2.720 | 2.600 |
| 18 | 2.720 | 6.550 | 5.260 | 18.600 | 5.060 | 18.800 | 17.400 | 5.580 | 3.290 | 2.250 | 2.690 | 2.260 |
| 19 | 2.810 | 5.940 | 8.500 | 13.500 | 5.100 | 17.300 | 16.000 | 5.700 | 3.110 | 2.380 | 2.690 | 2.350 |
| 20 | 2.750 | 5.660 | 9.320 | 11.200 | 4.660 | 16.600 | 15.400 | 5.340 | 3.170 | 2.600 | 2.570 | 2.920 |
| 21 | 2.990 | 4.980 | 11.100 | 9.950 | 4.560 | 18.000 | 15.000 | 4.700 | 3.200 | 2.570 | 2.480 | 2.510 |
| 22 | 3.110 | 4.780 | 11.000 | 8.700 | 4.740 | 26.100 | 13.800 | 4.320 | 3.170 | 2.450 | 2.600 | 2.320 |
| 23 | 2.900 | 4.660 | 10.000 | 9.380 | 4.980 | 25.300 | 12.800 | 4.180 | 2.630 | 2.570 | 3.020 | 2.290 |
| 24 | 2.660 | 4.980 | 8.500 | 10.000 | 11.900 | 26.700 | 12.000 | 4.420 | 2.810 | 3.170 | 2.720 | 2.200 |
| 25 | 2.600 | 8.450 | 8.000 | 10.800 | 15.000 | 25.400 | 11.700 | 4.560 | 3.260 | 3.320 | 2.480 | 1.960 |
| 26 | 3.110 | 9.560 | 7.300 | 10.300 | 14.000 | 22.600 | 11.300 | 4.460 | 3.290 | 2.870 | 2.380 | 1.910 |
| 27 | 3.080 | 11.500 | 6.700 | 9.320 | 26.300 | 21.400 | 10.200 | 4.040 | 3.200 | 2.630 | 2.350 | 2.480 |
| 28 | 2.900 | 9.500 | 6.600 | 10.500 | 27.200 | 21.100 | 9.740 | 3.530 | 3.320 | 2.570 | 3.440 | 2.980 |
| 29 | 2.960 | 8.400 | 7.080 | 9.850 |  | 20.700 | 9.200 | 3.380 | 3.110 | 2.420 | 3.410 | 4.700 |
| 30 | 2.630 | 7.300 | 6.550 | 9.620 |  | 19.800 | 8.850 | 3.230 | 2.840 | 2.320 | 3.930 | 5.580 |
| 31 | 2.540 |  | 5.820 | 8.300 |  | 21.200 |  | 3.230 |  | 2.300 | 3.290 |  |

STATION LOCATION DELAWARE RIVER AT

MARTINS CREEK, PENNSYLVANIA

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 4 | 61 | 10 | 14 | - | - | - | - | - | - | 3 | 4 | 4 | 4 | 7 | 6 | | | | | | |
| 10 | 11 | 61 | 10 | 25 | - | - | - | - | - | - | 3 | 5 | 6 | 5 | 9 | 7 | | | | | | |
| 10 | 18 | 61 | 10 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 5 | 4 | 7 | 6 | | | | | | |
| 10 | 25 | 61 | 11 | 6 | - | - | - | - | - | - | 8 | 6 | 4 | 6 | 12 | 8 | | | | | | |
| 11 | 1 | 61 | 11 | 13 | - | - | - | - | - | - | 4 | 4 | 5 | 4 | 9 | 6 | | | | | | |
| 11 | 8 | 61 | 11 | 22 | - | - | - | - | - | - | 5 | 5 | 11 | 5 | 16 | 7 | | | | | | |
| 11 | 15 | 61 | 11 | 27 | - | - | - | - | - | - | 2 | 5 | 27 | 6 | 29 | 8 | | | | | | |
| 11 | 22 | 61 | 12 | 4 | 0 | 1 | 0 | 0 | 0 | 1 | 10 | 4 | 19 | 5 | 29 | 6 | | | | | | |
| 11 | 29 | 61 | 12 | 6 | - | - | - | - | - | - | 33 | 6 | 28 | 6 | 61 | 8 | | | | | | |
| 12 | 6 | 61 | 12 | 14 | - | - | - | - | - | - | 6 | 5 | 17 | 5 | 23 | 7 | | | | | | |
| 12 | 13 | 61 | 12 | 22 | - | - | - | - | - | - | 14 | 6 | 26 | 6 | 40 | 8 | | | | | | |
| 12 | 20 | 61 | 12 | 29 | 0 | 1 | 0 | 1 | 0 | 1 | 18 | 4 | 25 | 5 | 43 | 6 | | | | | | |
| 12 | 27 | 61 | 1 | 8 | - | - | - | - | - | - | 17 | 5 | 24 | 6 | 41 | 8 | | | | | | |
| 1 | 3 | 62 | 1 | 15 | - | - | - | - | - | - | 2 | 5 | 7 | 5 | 9 | 7 | | | | | | |
| 1 | 10 | 62 | 1 | 22 | - | - | - | - | - | - | 24 | 6 | 31 | 6 | 55 | 8 | | | | | | |
| 1 | 17 | 62 | 1 | 25 | 0 | 1 | 0 | 1 | 0 | 1 | 67 | 7 | 54 | 5 | 121 | 8 | | | | | | |
| 1 | 24 | 62 | 2 | 1 | - | - | - | - | - | - | 14 | 6 | 28 | 6 | 42 | 8 | | | | | | |
| 1 | 31 | 62 | 2 | 12 | - | - | - | - | - | - | 19 | 6 | 34 | 6 | 53 | 8 | | | | | | |
| 2 | 7 | 62 | 2 | 20 | - | - | - | - | - | - | 9 | 5 | 23 | 6 | 32 | 8 | | | | | | |
| 2 | 14 | 62 | 2 | 27 | - | - | - | - | - | - | 14 | 6 | 16 | 6 | 30 | 8 | | | | | | |
| 2 | 21 | 62 | 3 | 7 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 4 | 14 | 5 | 20 | 6 | | | | | | |
| 2 | 28 | 62 | 3 | 13 | - | - | - | - | - | - | 97 | 8 | 73 | 7 | 170 | 11 | | | | | | |
| 3 | 7 | 62 | 3 | 20 | - | - | - | - | - | - | 25 | 6 | 39 | 7 | 64 | 9 | | | | | | |
| 3 | 14 | 62 | 3 | 29 | - | - | - | - | - | - | 35 | 7 | 29 | 6 | 64 | 9 | | | | | | |
| 3 | 21 | 62 | 4 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 4 | 21 | 4 | 27 | 6 | | | | | | |
| 3 | 28 | 62 | 4 | 12 | - | - | - | - | - | - | 6 | 6 | 10 | 4 | 16 | 7 | | | | | | |
| 4 | 4 | 62 | 4 | 16 | - | - | - | - | - | - | 20 | 5 | 18 | 4 | 38 | 6 | | | | | | |
| 4 | 11 | 62 | 4 | 23 | - | - | - | - | - | - | 13 | 6 | 12 | 5 | 25 | 7 | | | | | | |
| 4 | 18 | 62 | 5 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 4 | 15 | 5 | 20 | 6 | | | | | | |
| 5 | 2 | 62 | 6 | 4 | - | - | - | - | - | - | 7 | 7 | 16 | 7 | 23 | 10 | | | | | | |
| 5 | 9 | 62 | 6 | 20 | - | - | - | - | - | - | 2 | 6 | 11 | 7 | 13 | 9 | | | | | | |
| 5 | 16 | 62 | 6 | 21 | - | - | - | - | - | - | 2 | 6 | 14 | 7 | 16 | 9 | | | | | | |
| 5 | 23 | 62 | 6 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 5 | 11 | 6 | 15 | 8 | | | | | | |
| 5 | 29 | 62 | 7 | 30 | - | - | - | - | - | - | 15 | 3 | 18 | 3 | 33 | 4 | | | | | | |
| 6 | 6 | 62 | 7 | 5 | - | - | - | - | - | - | 4 | 5 | 8 | 7 | 12 | 9 | | | | | | |
| 6 | 13 | 62 | 7 | 10 | - | - | - | - | - | - | 10 | 5 | 17 | 7 | 27 | 9 | | | | | | |
| 6 | 20 | 62 | 7 | 17 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 5 | 7 | 5 | 7 | 7 | | | | | | |
| 6 | 27 | 62 | 7 | 23 | - | - | - | - | - | - | 6 | 5 | 6 | 6 | 12 | 7 | | | | | | |
| 7 | 3 | 62 | 8 | 3 | - | - | - | - | - | - | 4 | 4 | 7 | 4 | 11 | 6 | | | | | | |
| 7 | 11 | 62 | 8 | 13 | - | - | - | - | - | - | 1 | 4 | 6 | 4 | 7 | 6 | | | | | | |

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** DELAWARE-LEHIGH RIVERS

**STATION LOCATION** DELAWARE RIVER AT
MARTINS CREEK, PENNSYLVANIA 6

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 7 | 18 | 62 | 8 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 12 | 6 | 14 | 8 | | | | | | |
| 7 | 25 | 62 | 8 | 21 | - | - | - | - | - | - | 6 | 5 | 17 | 6 | 23 | 7 | | | | | | |
| 8 | 1 | 62 | 9 | 20 | - | - | - | - | - | - | 1 | 5 | 11 | 6 | 12 | 7 | | | | | | |
| 8 | 8 | 62 | 8 | 27 | - | - | - | - | - | - | 1 | 3 | 4 | 3 | 5 | 4 | | | | | | |
| 8 | 15 | 62 | 8 | 30 | - | - | - | - | - | - | 3 | 6 | 10 | 6 | 13 | 8 | | | | | | |
| 8 | 22 | 62 | 9 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 9 | 4 | 12 | 6 | | | | | | |
| 8 | 29 | 62 | 9 | 14 | - | - | - | - | - | - | 1 | 6 | 7 | 7 | 8 | 9 | | | | | | |
| 9 | 5 | 62 | 10 | 1 | - | - | - | - | - | - | 5 | 6 | 9 | 7 | 14 | 9 | | | | | | |
| 9 | 12 | 62 | 10 | 8 | - | - | - | - | - | - | 3 | 6 | 9 | 6 | 12 | 8 | | | | | | |
| 9 | 19 | 62 | 10 | 10 | 1 | 1 | 0 | 0 | 1 | 1 | 8 | 6 | 12 | 6 | 20 | 8 | | | | | | |
| 9 | 26 | 62 | 10 | 22 | - | - | - | - | - | - | 0 | 4 | 51 | 3 | 51 | 5 | | | | | | |

687-228 O-63—18

**STATION LOCATION** DELAWARE RIVER AT

MARTINS CREEK, PENNSYLVANIA 61

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE - GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 200 | 0 | 20 | 70 | 0 | 0 | 20 | 0 | 130 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 100 | 0 | 40 | 20 | 0 | 0 | 0 | 0 | 60 | 0 | 100 | | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 500 | 0 | 20 | 60 | 0 | 20 | 0 | 150 | 290 | 0 | 60 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 1200 | 110 | 20 | 90 | 0 | 110 | 0 | 250 | 590 | 70 | 470 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 400 | 0 | 40 | 20 | 0 | 20 | 0 | 40 | 290 | 40 | 230 | | | | | | | | | | | | | | | | | | | | |
| 12 | 19 | 61 | 600 | 0 | 0 | 0 | 0 | 20 | 0 | 120 | 410 | 20 | 100 | | | | | | | | | | | | | | | | | | | | |
| 1 | 3 | 62 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 450 | 0 | 20 | 92 | 1 | 82 | 1 | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 400 | 0 | 50 | 70 | 0 | 0 | 20 | 20 | 270 | 0 | 160 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 300 | 0 | 0 | 20 | 0 | 20 | 0 | 0 | 220 | 0 | 180 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 400 | 0 | 0 | 0 | 0 | 20 | 40 | 20 | 340 | 0 | 270 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 1700 | 20 | 20 | 40 | 0 | 0 | 0 | 80 | 1510 | 0 | 230 | 84 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 600 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 570 | 0 | 140 | | | | | | | | | | | | | | | | | | | | |
| 4 | 4 | 62 | 500 | 0 | 20 | 0 | 0 | 0 | 40 | 20 | 410 | 20 | 100 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 500 | 20 | 0 | 20 | 20 | 20 | 50 | 0 | 320 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 2700 | 0 | 0 | 60 | 0 | 350 | 60 | 620 | 1570 | 40 | 100 | 92 | 2 | 81 | 2 | 68 | 2 | 71 | 2 | 88 | 1 | 51 | 1 | | | | | | | | |
| 5 | 21 | 62 | 8600 | 0 | 80 | 1940 | 0 | 170 | 0 | 4790 | 1670 | 480 | 890 | 68 | 5 | 38 | 3 | 40 | 2 | 81 | 2 | 87 | 2 | 71 | 2 | 88 | 1 | 44 | 1 | 73 | 1 | 51 | 1 |
| 6 | 4 | 62 | 14200 | 0 | 0 | 7950 | 0 | 710 | 70 | 4980 | 450 | 1630 | 1680 | 68 | 6 | 24 | 4 | 40 | 4 | 38 | 3 | 37 | 3 | 44 | 3 | 27 | 2 | 44 | 2 | 45 | 2 | 25 | 2 |
| 6 | 18 | 62 | 19200 | 10270 | 0 | 6170 | 0 | 910 | 120 | 700 | 1040 | 410 | 830 | 3 | 7 | 31 | 4 | 44 | 3 | 51 | 3 | 38 | 3 | 25 | 3 | 35 | 2 | 37 | 2 | 40 | 2 | | |
| 7 | 3 | 62 | 1900 | 60 | 0 | 760 | 0 | 0 | 0 | 250 | 800 | 80 | 510 | 38 | 2 | 68 | 1 | 40 | 1 | 92 | 1 | 88 | 1 | | | | | | | | | | |
| 7 | 16 | 62 | 400 | 0 | 0 | 120 | 0 | 0 | 0 | 120 | 190 | 60 | 80 | | | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 500 | 0 | 0 | 160 | 0 | 0 | 0 | 170 | 210 | 40 | 380 | | | | | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 800 | 150 | 0 | 330 | 0 | 40 | 0 | 0 | 250 | 0 | 0 | 40 | 1 | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 500 | 0 | 0 | 20 | 0 | 80 | 60 | 0 | 370 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 1700 | 80 | 40 | 170 | 0 | 80 | 0 | 170 | 1160 | 40 | 370 | 88 | 2 | 87 | 1 | | | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** PENNSYLVANIA
**MAJOR BASIN** NORTH ATLANTIC
**MINOR BASIN** DELAWARE-LEHIGH RIVERS
**STATION LOCATION** DELAWARE RIVER AT
MARTINS CREEK, PENNSYLVANIA 061

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable)* *Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable)* *Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 2 | 26 | 64 | 14 | 70 | 8 | 16 | 7 | 46 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 2 | 22 | 64 | 13 | 70 | 9 | 32 | 6 | 50 | 0 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 2 | 18 | 64 | 14 | 32 | 6 | 62 | 5 | 57 | 0 | 0 | 15 | 20 | 1 | 13 | 1 | | | | | | | 0 | | | | | | | 2 | 0 |
| 11 | 20 | 61 | 2 | 17 | 82 | 15 | 64 | 14 | 70 | 7 | 47 | 110 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 64 | 14 | 2 | 12 | 92 | 10 | 36 | 7 | 57 | 0 | 0 | 8 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 19 | 61 | 62 | 17 | 65 | 14 | 92 | 14 | 36 | 12 | 43 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 1 | 3 | 62 | 92 | 22 | 36 | 21 | 90 | 8 | 64 | 5 | 44 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 92 | 15 | 64 | 11 | 2 | 8 | 16 | 8 | 58 | 20 | 0 | 8 | 11 | 1 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 93 | 22 | 92 | 16 | 9 | 9 | 2 | 5 | 48 | 0 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 2 | 19 | 62 | 93 | 22 | 9 | 17 | 92 | 13 | 37 | 8 | 40 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 45 | 17 | 92 | 9 | 93 | 9 | 31 | 8 | 57 | 40 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 45 | 17 | 93 | 11 | 31 | 8 | 62 | 7 | 57 | 0 | 10 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 4 | 62 | 92 | 18 | 93 | 8 | 16 | 6 | 45 | 5 | 63 | 60 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 93 | 18 | 2 | 15 | 31 | 7 | 16 | 6 | 54 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 2 |
| 5 | 7 | 62 | 92 | 25 | 31 | 21 | 70 | 9 | 2 | 6 | 39 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 27 | 36 | 31 | 16 | 65 | 6 | 26 | 4 | 38 | 190 | 0 | 15 | 11 | 2 | | | | | | | | | 1 | | | | | | | 2 | 2 |
| 6 | 4 | 62 | 27 | 23 | 2 | 17 | 31 | 13 | 93 | 4 | 43 | 110 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 6 | 18 | 62 | 26 | 24 | 31 | 14 | 16 | 9 | 92 | 8 | 45 | 170 | 0 | 10 | 15 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 3 | 62 | 92 | 17 | 70 | 12 | 26 | 10 | 62 | 10 | 51 | 0 | 0 | 9 | | | | | | | | | | | 0 | | | | | | | 0 | 2 |
| 7 | 16 | 62 | 45 | 16 | 2 | 12 | 64 | 11 | 16 | 8 | 53 | 0 | 0 | 19 | 20 | 2 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 64 | 12 | 70 | 11 | 45 | 11 | 2 | 8 | 58 | 0 | 0 | 28 | 15 | 1 | 13 | 1 | | | | | | | 2 | | | | | | | 4 | 6 |
| 8 | 20 | 62 | 64 | 22 | 45 | 12 | 16 | 8 | 70 | 7 | 51 | 20 | 0 | 87 | 20 | 4 | 22 | 1 | | | | | | | 3 | 50 | 1 | | | | | 0 | 1 |
| 9 | 4 | 62 | 64 | 13 | 45 | 12 | 16 | 9 | 71 | 7 | 59 | 0 | 0 | 23 | 15 | 2 | 46 | 1 | | | | | | | 0 | | | | | | | 0 | 1 |
| 9 | 17 | 62 | 64 | 13 | 70 | 10 | 16 | 9 | 46 | 9 | 59 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*

*(Parts per billion)*

**MAJOR BASIN** NORTH ATLANTIC

**MINOR BASIN** DELAWARE-LEHIGH RIVERS

**STATION LOCATION** DELAWARE RIVER AT

MARTINS CREEK, PENNSYLVANIA 6

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 11 | 61 | 10 | 27 | 5390 | 173 | 46 | 127 | 1 | 11 | 17 | 3 | 2 | 12 | 0 | 7 | 2 | 1 | 7 |
| 11 | 1 | 61 | 11 | 20 | 5965 | 185 | 57 | 128 | 7 | 15 | 12 | 1 | 1 | 10 | 0 | 6 | 4 | 1 | 12 |
| 12 | 5 | 61 | 12 | 26 | 6578 | 183 | 50 | 133 | 1 | 13 | 13 | 1 | 1 | 11 | 0 | 7 | 4 | 1 | 11 |
| 12 | 26 | 61 | 1 | 2 | 1254 | 284 | 40 | 244 | 1 | 12 | 11 | 2 | 1 | 8 | 0 | 5 | 2 | 1 | 8 |
| 5 | 7 | 62 | 6 | 11 | 4200 | 191 | 112 | 79 | 1 | 17 | 31 | 2 | 2 | 25 | 2 | 12 | 7 | 1 | 43 |
| 6 | 11 | 62 | 6 | 28 | 5310 | 152 | 83 | 69 | 2 | 17 | 30 | 4 | 2 | 23 | 1 | 10 | 5 | 1 | 18 |
| 7 | 20 | 62 | 8 | 7 | 5960 | 162 | 76 | 86 | 2 | 17 | 29 | 4 | 2 | 22 | 1 | 10 | 5 | 2 | 11 |
| 8 | 16 | 62 | 8 | 30 | 4770 | 153 | 55 | 98 | 1 | 16 | 16 | 1 | 1 | 13 | 1 | 6 | 4 | 1 | 11 |
| 9 | 18 | 62 | 10 | 4 | 5390 | 169 | 75 | 94 | 2 | 22 | 16 | 1 | 1 | 14 | 0 | 8 | 7 | 2 | 18 |

MINOR BASIN DELAWARE LEHIGH RIVERS

STATION LOCATION DELAWARE RIVER AT

MARTINS CREEK, PENNSYLVANIA 61

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 4 | 61 | 15.6 | 8.8 | 7.6 | .8 | 8 | .8 | 1.8 | .1 | 2 | 29 | 40 | 19 | 21 | 11 | .0 | 56 | 880000 |
| 10 | 10 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *100 |
| 10 | 11 | 61 | 17.8 | 8.9 | 7.5 | .4 | 6 | 1.0 | 2.0 | .1 | 3 | 26 | 35 | 18 | 19 | 12 | .2 | 53 | - |
| 10 | 18 | 61 | 13.2 | 9.9 | 7.7 | .9 | 4 | 1.0 | 2.1 | .1 | 2 | 26 | 40 | 16 | 18 | 11 | .0 | 54 | - |
| 10 | 25 | 61 | 12.2 | 10.5 | 7.7 | .1 | 11 | 1.0 | 2.0 | .1 | 2 | 23 | 44 | 31 | 33 | 10 | .1 | 50 | - |
| 11 | 1 | 61 | 14.8 | 9.5 | 7.8 | .8 | 11 | 1.0 | 2.2 | .1 | 3 | 25 | 36 | 11 | 17 | 13 | - | 53 | - |
| 11 | 9 | 61 | 10.6 | 9.8 | 7.5 | 1.0 | 10 | 1.4 | 2.1 | .2 | 3 | 22 | 34 | 18 | 31 | 14 | .1 | 51 | - |
| 11 | 15 | 61 | 10.0 | 10.4 | 7.6 | .3 | 6 | 1.2 | 3.1 | .1 | 4 | 25 | 38 | 17 | 23 | 14 | .1 | 58 | 490 |
| 11 | 22 | 61 | 5.6 | 11.8 | 7.5 | .1 | 8 | 1.4 | - | .1 | 3 | 24 | 36 | 13 | 25 | 15 | - | 54 | 780 |
| 11 | 27 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1100 |
| 11 | 29 | 61 | 4.0 | 12.0 | 7.4 | .3 | 7 | 1.3 | 2.8 | .2 | 3 | 18 | 30 | 18 | 66 | 16 | .0 | 48 | - |
| 12 | 6 | 61 | 4.4 | 12.2 | 7.6 | .2 | 4 | 1.0 | 2.1 | .1 | 3 | 23 | 34 | 14 | 23 | 15 | - | 54 | 62 |
| 12 | 13 | 61 | 4.0 | 12.1 | 7.5 | .3 | 4 | .5 | 2.2 | .1 | 3 | 24 | 38 | 11 | 19 | 15 | - | 58 | 6400 |
| 12 | 20 | 61 | 3.0 | 12.9 | 7.5 | .8 | 4 | 1.0 | - | .1 | 4 | 25 | 40 | 13 | 33 | 17 | - | 62 | 6900 |
| 12 | 27 | 61 | .6 | 13.5 | 7.6 | .7 | 1 | 1.0 | 2.1 | .2 | 5 | 20 | 34 | 17 | 29 | 15 | - | 54 | 430 |
| 1 | 3 | 62 | .4 | 13.8 | 7.6 | .3 | 0 | .9 | 2.7 | .2 | 3 | 25 | 40 | 13 | 23 | 16 | .0 | 60 | 260 |
| 1 | 10 | 62 | .6 | 13.3 | 7.4 | .9 | 16 | 1.8 | 4.5 | .4 | 3 | 13 | 22 | 23 | 89 | 12 | .1 | 37 | 1100 |
| 1 | 17 | 62 | .6 | 13.4 | 7.2 | 1.1 | 14 | 1.2 | 4.2 | .3 | 2 | 12 | 22 | 18 | 92 | 15 | - | 42 | 1200 |
| 1 | 24 | 62 | 1.0 | 13.5 | 7.3 | .7 | 9 | .9 | 2.8 | .1 | 2 | 16 | 28 | 11 | 30 | 13 | .0 | 48 | 770 |
| 1 | 31 | 62 | .0 | 13.6 | 7.3 | 1.1 | 11 | .9 | 4.5 | .2 | 5 | 18 | 30 | 13 | 26 | 13 | - | 51 | 1000 |
| 2 | 7 | 62 | .0 | 13.1 | 7.3 | .6 | 8 | 1.0 | 2.7 | .1 | 3 | 19 | 32 | 13 | 25 | 13 | - | 54 | 3500 |
| 2 | 14 | 62 | .6 | 13.5 | 7.3 | .4 | 10 | 1.1 | 2.7 | .2 | 4 | 23 | 36 | 15 | 26 | 14 | - | 62 | 3200 |
| 2 | 21 | 62 | .6 | 13.5 | 7.4 | .3 | 6 | .7 | 2.4 | .1 | 4 | 24 | 36 | 11 | 18 | 16 | .1 | 63 | 6700 |
| 2 | 28 | 62 | 2.0 | 13.0 | 7.4 | 2.3 | 13 | 3.0 | 5.1 | .4 | 4 | 24 | 38 | 14 | 84 | 38 | .3 | 65 | 41000 |
| 3 | 7 | 62 | 1.4 | 13.2 | 7.4 | 1.1 | 12 | 2.0 | 4.3 | .2 | 4 | 23 | 34 | 18 | 30 | 12 | .1 | 61 | 8300 |
| 3 | 14 | 62 | 2.6 | 12.5 | 7.3 | 1.8 | 17 | 1.5 | 5.0 | .2 | 3 | 13 | 24 | 18 | 95 | 11 | - | 42 | 550 |
| 3 | 21 | 62 | 4.4 | 12.3 | 7.2 | 1.0 | 8 | 1.7 | 3.3 | .1 | 3 | 13 | 24 | 17 | 35 | 11 | - | 42 | 60 |
| 3 | 28 | 62 | 6.8 | 11.4 | 7.1 | .7 | 9 | 1.4 | 3.9 | .2 | 2 | 10 | 20 | 13 | 35 | 8 | .1 | 34 | 230 |
| 4 | 4 | 62 | 5.6 | 11.9 | 6.9 | .8 | 14 | 1.6 | 4.3 | .4 | 1 | 10 | 20 | 14 | 103 | 8 | - | 32 | 300 |
| 4 | 11 | 62 | 7.2 | 11.9 | 6.9 | .5 | 7 | .9 | 3.3 | .1 | 3 | 8 | 22 | 17 | 35 | 8 | - | 34 | 150 |
| 4 | 18 | 62 | 7.2 | 12.3 | 7.2 | .3 | 7 | 1.0 | 3.0 | .2 | 2 | 13 | 26 | 19 | 39 | 9 | .1 | 40 | 160 |
| 4 | 25 | 62 | 12.8 | 10.4 | 7.3 | 1.7 | 14 | .8 | 2.3 | .1 | 2 | 16 | 27 | 14 | 25 | 11 | .1 | 43 | 100 |
| 5 | 2 | 62 | 14.4 | 9.3 | 7.3 | 1.5 | 16 | 1.2 | 2.7 | .1 | 2 | 19 | 25 | 15 | 31 | 11 | - | 41 | 800 |
| 5 | 9 | 62 | 13.2 | 9.9 | 7.4 | 1.5 | 17 | .6 | 2.4 | .1 | 3 | 22 | 34 | 15 | 33 | 11 | - | 50 | 300 |
| 5 | 16 | 62 | 17.8 | 8.9 | 7.6 | 1.3 | 13 | .6 | 2.8 | .2 | 4 | 26 | 36 | 7 | 26 | 11 | - | 54 | 500 |
| 5 | 23 | 62 | 22.2 | 8.5 | 7.7 | 2.0 | 15 | 1.3 | 3.5 | .2 | 4 | 27 | 18 | 15 | 38 | 11 | - | 58 | 250 |
| 5 | 29 | 62 | 20.6 | 8.3 | 8.0 | 2.5 | 15 | 1.4 | - | .2 | 3 | 26 | 20 | 15 | 53 | 11 | .1 | 62 | *10 |
| 6 | 6 | 62 | 21.6 | 7.6 | 7.6 | 1.4 | 15 | 1.3 | 3.5 | .2 | 4 | 30 | 20 | 10 | 46 | 13 | - | 61 | - |
| 6 | 13 | 62 | 21.0 | 7.6 | 7.6 | 1.1 | 12 | 1.1 | 2.2 | .2 | 3 | 31 | 16 | 11 | 43 | 12 | - | 64 | 600 |

STATION LOCATION DELAWARE RIVER AT

MARTINS CREEK, PENNSYLVANIA 6

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFOR per 100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 20 | 62 | 24.4 | 6.8 | 7.7 | .3 | 9 | 1.1 | 2.2 | .1 | 4 | 27 | 14 | 10 | 26 | 11 | - | 59 | 4 |
| 6 | 27 | 62 | 23.4 | 7.8 | 8.0 | .6 | 8 | .7 | 1.8 | .1 | 5 | 24 | 20 | 0 | 20 | 12 | .1 | 52 | 1 |
| 7 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 |
| 7 | 5 | 62 | 23.4 | 7.3 | 7.7 | .5 | 8 | .2 | 2.1 | .2 | 2 | 23 | 14 | 11 | 23 | 10 | - | 54 | |
| 7 | 11 | 62 | 23.8 | 7.0 | 7.8 | .2 | 17 | .6 | 1.8 | .1 | 3 | 23 | 16 | 5 | 23 | 17 | - | 50 | 1 |
| 7 | 18 | 62 | 22.4 | 7.5 | 7.8 | .8 | 11 | 1.1 | - | .1 | 4 | 24 | 12 | 10 | 21 | 13 | - | 51 | 1 |
| 7 | 25 | 62 | 22.4 | 7.4 | 7.7 | .2 | 5 | 1.0 | 2.2 | .1 | 4 | 24 | 18 | 8 | 21 | 11 | - | 55 | 2 |
| 8 | 1 | 62 | 24.4 | 7.5 | 7.6 | .5 | 3 | .9 | 2.4 | .1 | 5 | 22 | 14 | 11 | 22 | 16 | - | 50 | 1 |
| 8 | 8 | 62 | 23.4 | 7.0 | 7.4 | .7 | 14 | 1.0 | 2.2 | .1 | 3 | 21 | 14 | 7 | 22 | 14 | - | 50 | 9 |
| 8 | 15 | 62 | 22.2 | 7.5 | 7.8 | .4 | 19 | 1.1 | 2.1 | .1 | 3 | 21 | 10 | 7 | 18 | 12 | - | 52 | 3 |
| 8 | 22 | 62 | 23.8 | 6.8 | 7.6 | .7 | 11 | .9 | 1.4 | .1 | 4 | 23 | 16 | 9 | 21 | 10 | .1 | 53 | 1 |
| 8 | 29 | 62 | 23.6 | 6.7 | 7.5 | .3 | 11 | .3 | 2.0 | .1 | 3 | 28 | 16 | 11 | 19 | 8 | .0 | 56 | 5 |
| 9 | 5 | 62 | 21.4 | 7.3 | 7.4 | .9 | 16 | 1.1 | 2.0 | .2 | 4 | 26 | 18 | 15 | 25 | 9 | - | 55 | 1 |
| 9 | 12 | 62 | 21.0 | 7.8 | 7.7 | .3 | 13 | 1.0 | 1.7 | .1 | 4 | 24 | 20 | 13 | 18 | 8 | .0 | 51 | 8 |
| 9 | 19 | 62 | 18.2 | 7.7 | 7.4 | .3 | 12 | .8 | 1.8 | .1 | 3 | 21 | 38 | 15 | 17 | 10 | - | 53 | |
| 9 | 26 | 62 | 16.6 | 8.2 | 7.6 | .2 | 10 | .6 | 1.5 | .2 | 4 | 18 | 38 | 17 | 18 | 10 | .0 | 58 | |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Belvidere, New Jersey
Operated by U.S. Geological Survey

| | |
|---|---|
| STATE | Pennsylvania |
| MAJOR BASIN | North Atlantic |
| MINOR BASIN | Delaware-Lehigh Rivers |
| STATION LOCATION | Delaware River at<br>Martins Creek, Pennsylvania |

| ay | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.870 | 2.380 | 3.850 | 2.680 | 4.380 | 8.980 | 29.900 | 6.840 | 2.090 | 1.870 | 1.630 | 2.020 |
| 2 | 1.890 | 1.780 | 3.730 | 2.620 | 4.050 | 8.080 | 53.600 | 7.540 | 2.500 | 1.740 | 1.640 | 2.020 |
| 3 | 1.940 | 1.780 | 3.350 | 2.740 | 3.780 | 9.020 | 34.100 | 7.420 | 2.310 | 1.660 | 1.580 | 1.450 |
| 4 | 2.220 | 2.090 | 2.930 | 3.780 | 4.280 | 7.100 | 22.600 | 6.840 | 2.060 | 1.580 | 1.580 | 1.370 |
| 5 | 2.090 | 2.360 | 2.930 | 3.170 | 4.100 | 6.030 | 17.600 | 6.060 | 2.020 | 1.600 | 1.630 | 1.380 |
| 6 | 1.970 | 2.270 | 2.950 | 3.880 | 4.740 | 5.520 | 14.800 | 5.460 | 2.250 | 1.580 | 1.520 | 1.700 |
| 7 | 1.950 | 3.610 | 2.810 | 9.320 | 4.790 | 4.900 | 14.500 | 4.790 | 2.250 | 1.570 | 1.750 | 1.630 |
| 8 | 1.950 | 4.100 | 2.910 | 29.000 | 4.880 | 4.790 | 27.700 | 4.900 | 2.110 | 1.580 | 2.160 | 1.600 |
| 9 | 1.950 | 3.350 | 3.040 | 23.200 | 4.930 | 4.990 | 33.300 | 5.220 | 2.060 | 1.570 | 2.070 | 1.540 |
| 0 | 1.920 | 3.260 | 2.930 | 15.600 | 4.600 | 4.710 | 25.600 | 4.900 | 1.950 | 1.600 | 2.440 | 1.310 |
| 1 | 1.840 | 2.760 | 2.700 | 11.100 | 3.470 | 4.960 | 21.400 | 4.690 | 1.700 | 1.870 | 2.070 | 1.370 |
| 2 | 1.900 | 1.920 | 2.830 | 8.240 | 2.850 | 9.750 | 17.600 | 4.570 | 2.230 | 1.640 | 1.770 | 1.740 |
| 3 | 1.900 | 1.800 | 3.560 | 6.570 | 3.000 | 15.800 | 16.200 | 3.920 | 2.680 | 1.740 | 1.890 | 1.620 |
| 4 | 1.840 | 2.270 | 3.210 | 5.880 | 3.590 | 21.000 | 17.000 | 3.320 | 2.480 | 1.850 | 1.630 | 1.640 |
| 5 | 1.920 | 3.300 | 2.870 | 6.000 | 3.280 | 19.000 | 16.200 | 3.540 | 2.200 | 1.770 | 1.720 | 1.720 |
| 6 | 1.940 | 4.000 | 2.270 | 10.800 | 3.080 | 15.600 | 14.200 | 3.780 | 2.140 | 1.580 | 1.720 | 1.890 |
| 7 | 1.900 | 4.230 | 2.250 | 16.200 | 3.280 | 14.000 | 13.300 | 3.760 | 2.090 | 1.520 | 1.740 | 1.350 |
| 8 | 1.850 | 3.850 | 2.400 | 11.200 | 3.120 | 12.600 | 11.800 | 3.920 | 1.950 | 1.580 | 1.870 | 1.540 |
| 9 | 1.840 | 3.610 | 3.830 | 8.520 | 2.680 | 11.800 | 11.100 | 3.730 | 1.990 | 1.700 | 1.740 | 1.900 |
| 0 | 2.040 | 3.170 | 6.120 | 7.100 | 2.540 | 12.100 | 11.100 | 3.190 | 2.090 | 1.630 | 1.520 | 1.690 |
| 1 | 2.110 | 3.040 | 7.220 | 5.970 | 2.890 | 13.800 | 10.200 | 2.760 | 1.990 | 1.600 | 1.640 | 1.600 |
| 2 | 2.040 | 3.000 | 6.840 | 6.330 | 2.910 | 17.000 | 9.580 | 2.660 | 1.600 | 1.700 | 2.180 | 1.520 |
| 3 | 1.750 | 3.000 | 5.400 | 6.660 | 2.890 | 18.400 | 8.740 | 2.680 | 1.630 | 1.660 | 1.750 | 1.460 |
| 4 | 1.840 | 3.300 | 5.020 | 7.600 | 3.520 | 19.700 | 8.860 | 2.500 | 1.990 | 1.800 | 1.630 | 1.280 |
| 5 | 2.270 | 4.990 | 4.490 | 8.200 | 3.610 | 17.400 | 8.610 | 2.660 | 2.130 | 1.780 | 1.620 | 1.300 |
| 6 | 2.250 | 7.360 | 3.900 | 6.540 | 4.360 | 16.000 | 7.680 | 2.500 | 2.130 | 1.820 | 1.600 | 1.720 |
| 7 | 2.090 | 6.940 | 3.780 | 6.980 | 6.420 | 15.900 | 7.020 | 2.250 | 2.350 | 1.820 | 1.380 | 1.820 |
| 8 | 2.130 | 5.820 | 4.570 | 6.780 | 8.780 | 16.000 | 6.630 | 2.040 | 2.070 | 1.630 | 1.480 | 2.420 |
| 9 | 1.800 | 5.100 | 4.380 | 7.060 | | 15.500 | 6.330 | 1.820 | 1.940 | 1.580 | 1.970 | 2.830 |
| 0 | 1.770 | 4.490 | 3.300 | 6.150 | | 15.900 | 5.760 | 1.820 | 1.940 | 1.520 | 1.750 | 2.400 |
| 1 | 1.920 | | 3.080 | 5.070 | | 18.500 | | 1.890 | | 1.510 | 1.700 | |

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE - GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 23 | 61 | 100 | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 80 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 10 | 31 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 0 | 630 | | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 100 | 0 | 0 | 20 | 0 | 40 | 0 | 40 | 20 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 16 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 60 | | | | | | | | | | | | | | | | | | | | |
| 11 | 19 | 61 | 600 | 0 | 0 | 60 | 0 | 60 | 0 | 100 | 350 | 80 | 100 | | | | | | | | | | | | | | | | | | | | |
| 12 | 6 | 61 | 200 | 0 | 20 | 0 | 0 | 0 | 0 | 120 | 20 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 12 | 13 | 61 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 12 | 21 | 61 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 27 | 61 | 200 | 0 | 0 | 20 | 0 | 130 | 20 | 0 | 50 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 1 | 31 | 62 | 400 | 0 | 0 | 20 | 0 | 50 | 20 | 50 | 230 | 50 | 20 | | | | | | | | | | | | | | | | | | | | |
| 2 | 14 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 120 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 2 | 27 | 62 | 500 | 0 | 0 | 40 | 0 | 210 | 0 | 60 | 150 | 0 | 0 | 51 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 14 | 62 | 400 | 20 | 0 | 0 | 0 | 190 | 50 | 60 | 100 | 0 | 60 | 51 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 27 | 62 | 300 | 0 | 0 | 40 | 0 | 0 | 20 | 0 | 270 | 0 | 60 | | | | | | | | | | | | | | | | | | | | |
| 4 | 11 | 62 | 1100 | 40 | 0 | 0 | 0 | 60 | 580 | 170 | 250 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 4 | 25 | 62 | 400 | 0 | 0 | 40 | 0 | 20 | 130 | 80 | 80 | 20 | 20 | | | | | | | | | | | | | | | | | | | | |
| 5 | 8 | 62 | 300 | 0 | 0 | 40 | 0 | 0 | 0 | 150 | 110 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 5 | 29 | 62 | 1000 | 0 | 0 | 210 | 60 | 20 | 0 | 550 | 130 | 40 | 250 | 68 | 2 | | | | | | | | | | | | | | | | | | |
| 6 | 12 | 62 | 500 | 0 | 0 | 60 | 0 | 60 | 20 | 40 | 270 | 0 | 150 | | | | | | | | | | | | | | | | | | | | |
| 6 | 27 | 62 | 800 | 0 | 0 | 170 | 0 | 150 | 230 | 20 | 250 | 0 | 20 | 63 | 1 | | | | | | | | | | | | | | | | | | |
| 8 | 17 | 62 | 800 | 0 | 20 | 40 | 0 | 100 | 20 | 40 | 580 | 0 | 170 | 81 | 1 | | | | | | | | | | | | | | | | | | |
| 9 | 6 | 62 | 600 | 80 | 0 | 230 | 0 | 120 | 20 | 80 | 40 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 9 | 20 | 62 | 200 | 0 | 0 | 60 | 0 | 0 | 0 | 10 | 100 | 30 | 140 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 23 | 61 | 32 | 15 | 33 | 10 | 57 | 8 | 64 | 4 | 63 | 150 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 31 | 61 | 32 | 15 | 33 | 14 | 64 | 8 | 31 | 5 | 58 | 20 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 33 | 32 | 64 | 13 | 32 | 11 | 2 | 5 | 39 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 16 | 61 | 33 | 19 | 32 | 13 | 65 | 5 | 57 | 4 | 59 | 20 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 11 | 19 | 61 | 32 | 20 | 43 | 16 | 74 | 10 | 97 | 6 | 48 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 6 | 61 | 33 | 34 | 32 | 6 | 64 | 5 | 1 | 5 | 49 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 13 | 61 | 33 | 15 | 64 | 6 | 88 | 5 | 32 | 5 | 69 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 3 | 0 |
| 12 | 21 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 27 | 61 | 32 | 6 | 97 | 6 | 33 | 5 | 92 | 4 | 79 | 20 | 0 | 10 | | | | | | | | | | | 13 | 76 | 2 | 51 | 1 | | | 1 | 1 |
| 1 | 31 | 62 | 43 | 10 | 92 | 10 | 32 | 8 | 97 | 5 | 67 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 14 | 62 | | | | | | | | | | 20 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 1 | 1 |
| 2 | 27 | 62 | | | | | | | | | | 20 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 3 | 14 | 62 | 92 | 11 | 2 | 10 | 43 | 7 | 74 | 6 | 66 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 3 | 27 | 62 | 92 | 15 | 43 | 9 | 62 | 6 | 71 | 4 | 66 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 11 | 62 | 92 | 9 | 57 | 9 | 49 | 5 | 50 | 5 | 72 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 25 | 62 | 82 | 19 | 92 | 4 | 26 | 4 | 43 | 4 | 69 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 5 |
| 5 | 8 | 62 | 57 | 14 | 71 | 10 | 1 | 8 | 43 | 7 | 61 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 29 | 62 | 57 | 26 | 28 | 9 | 50 | 7 | 43 | 7 | 51 | 0 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 12 | 62 | 57 | 20 | 43 | 6 | 32 | 5 | 2 | 4 | 65 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 27 | 62 | 95 | 16 | 43 | 9 | 92 | 7 | 57 | 5 | 63 | 0 | 0 | 8 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 8 | 17 | 62 | 32 | 24 | 92 | 10 | 53 | 7 | 65 | 7 | 52 | 0 | 0 | 442 | 20 | 7 | 11 | 3 | 17 | 3 | 22 | 1 | 16 | 1 | 0 | | | | | | | 12 | 3 |
| 9 | 6 | 62 | 43 | 16 | 32 | 12 | 92 | 8 | 53 | 6 | 58 | 0 | 0 | 228 | 15 | 6 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 20 | 62 | 93 | 9 | 32 | 6 | 33 | 5 | 3 | 5 | 75 | 0 | 0 | 175 | 20 | 5 | 22 | 1 | 11 | 1 | | | | | 0 | | | | | | | 6 | 0 |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** SOUTHEAST

**MINOR BASIN** PERDIDO-ESCAMBIA RIVERS

**STATION LOCATION** ESCAMBIA RIVER AT
CENTURY, FLORIDA

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 23 | 61 | 11 | 1 | - | - | - | - | - | - | 9 | 5 | 11 | 6 | 20 | 8 | | | | | | |
| 10 | 31 | 61 | 11 | 10 | - | - | - | - | - | - | 2 | 5 | 5 | 6 | 7 | 8 | | | | | | |
| 11 | 6 | 61 | 11 | 16 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 4 | 1 | 5 | 5 | 6 | | | | | | |
| 11 | 14 | 61 | 11 | 28 | - | - | - | - | - | - | 8 | 5 | 10 | 6 | 18 | 8 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | - | - | - | - | - | - | 24 | 7 | 1 | 5 | 25 | 9 | | | | | | |
| 12 | 1 | 61 | 12 | 12 | - | - | - | - | - | - | 5 | 6 | 0 | 5 | 5 | 8 | | | | | | |
| 12 | 6 | 61 | 12 | 14 | 0 | 1 | 0 | 0 | 0 | 1 | 10 | 5 | 7 | 6 | 17 | 8 | | | | | | |
| 12 | 13 | 61 | 12 | 26 | - | - | - | - | - | - | 36 | 7 | 25 | 6 | 61 | 9 | | | | | | |
| 12 | 21 | 61 | 1 | 2 | - | - | - | - | - | - | 0 | 6 | 25 | 6 | 25 | 8 | | | | | | |
| 12 | 27 | 61 | 1 | 3 | - | - | - | - | - | - | 23 | 6 | 15 | 6 | 38 | 8 | | | | | | |
| 1 | 23 | 62 | 1 | 31 | 0 | 1 | 0 | 0 | 0 | 1 | 30 | 5 | 19 | 4 | 49 | 7 | | | | | | |
| 1 | 31 | 62 | 2 | 12 | - | - | - | - | - | - | 38 | 7 | 15 | 5 | 53 | 9 | | | | | | |
| 2 | 7 | 62 | 2 | 14 | 1 | 1 | 0 | 1 | 1 | 1 | 35 | 5 | 10 | 4 | 45 | 6 | | | | | | |
| 2 | 14 | 62 | 2 | 23 | - | - | - | - | - | - | 15 | 5 | 14 | 6 | 29 | 8 | | | | | | |
| 2 | 23 | 62 | 3 | 6 | - | - | - | - | - | - | 56 | 7 | 31 | 6 | 87 | 9 | | | | | | |
| 2 | 27 | 62 | 3 | 9 | - | - | - | - | - | - | 43 | 7 | 28 | 6 | 71 | 9 | | | | | | |
| 3 | 9 | 62 | 3 | 20 | 1 | 1 | 0 | 1 | 1 | 1 | 28 | 5 | 13 | 4 | 41 | 6 | | | | | | |
| 3 | 14 | 62 | 3 | 26 | - | - | - | - | - | - | 21 | 6 | 18 | 6 | 39 | 8 | | | | | | |
| 3 | 21 | 62 | 4 | 3 | - | - | - | - | - | - | 20 | 6 | 13 | 5 | 33 | 7 | | | | | | |
| 3 | 27 | 62 | 4 | 4 | - | - | - | - | - | - | 78 | 6 | 29 | 5 | 107 | 7 | | | | | | |
| 4 | 3 | 62 | 4 | 13 | 1 | 1 | 0 | 1 | 1 | 1 | 102 | 7 | 61 | 6 | 163 | 0 | | | | | | |
| 4 | 11 | 62 | 4 | 24 | - | - | - | - | - | - | 58 | 7 | 35 | 6 | 93 | 9 | | | | | | |
| 4 | 18 | 62 | 4 | 30 | - | - | - | - | - | - | 39 | 7 | 27 | 6 | 66 | 10 | | | | | | |
| 4 | 25 | 62 | 5 | 23 | - | - | - | - | - | - | 1 | 7 | 8 | 7 | 9 | 10 | | | | | | |
| 5 | 2 | 62 | 5 | 25 | - | - | - | - | - | - | 75 | 9 | 42 | 7 | 117 | 11 | | | | | | |
| 5 | 8 | 62 | 6 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 10 | 7 | 10 | 7 | 20 | 10 | | | | | | |
| 5 | 17 | 62 | 6 | 25 | - | - | - | - | - | - | 11 | 7 | 12 | 7 | 23 | 10 | | | | | | |
| 5 | 29 | 62 | 6 | 29 | - | - | - | - | - | - | 3 | 3 | 8 | 3 | 11 | 4 | | | | | | |
| 6 | 6 | 62 | 7 | 3 | 1 | 1 | 0 | 0 | 1 | 1 | 4 | 5 | 13 | 6 | 17 | 8 | | | | | | |
| 6 | 12 | 62 | 7 | 14 | - | - | - | - | - | - | 7 | 3 | 16 | 4 | 23 | 5 | | | | | | |
| 6 | 19 | 62 | 7 | 17 | - | - | - | - | - | - | 2 | 5 | 7 | 6 | 9 | 7 | | | | | | |
| 6 | 27 | 62 | 7 | 24 | - | - | - | - | - | - | 17 | 6 | 10 | 5 | 27 | 7 | | | | | | |
| 7 | 31 | 62 | 9 | 12 | 0 | 1 | 0 | 0 | 0 | 0 | 10 | 6 | 19 | 7 | 29 | 9 | | | | | | |
| 8 | 17 | 62 | 8 | 31 | 0 | 1 | 0 | 1 | 0 | 1 | 21 | 6 | 10 | 6 | 31 | 8 | | | | | | |
| 8 | 24 | 62 | 9 | 6 | - | - | - | - | - | - | 9 | 6 | 13 | 6 | 22 | 8 | | | | | | |
| 9 | 6 | 62 | 9 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 6 | 1 | 7 | 5 | 9 | | | | | | |
| 9 | 20 | 62 | 10 | 17 | - | - | - | - | - | - | 34 | 7 | 6 | 6 | 40 | 9 | | | | | | |

**RECOVERED BY CARBON FILTER TECHNIQUE**

***RESULTS IN MICROGRAMS PER LITER***
*(Parts per billion)*

**MINOR BASIN** PERDIDO-ESCAMBIA RIVERS

**STATION LOCATION** ESCAMBIA RIVER AT
CENTURY, FLORIDA

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 11 | 6 | 61 | 11 | 19 | 3503 | 290 | 83 | 207 | 1 | 17 | 28 | 4 | 2 | 18 | 4 | 11 | 5 | 1 | 20 |
| 3 | 7 | 62 | 3 | 15 | 1844 | 329 | 113 | 216 | 15 | 23 | 24 | 2 | 2 | 17 | 3 | 14 | 9 | 1 | 27 |
| 5 | 28 | 62 | 6 | 4 | 3420 | 151 | 73 | 78 | 2 | 20 | 17 | 2 | 2 | 12 | 1 | 10 | 7 | 1 | 16 |
| 6 | 4 | 62 | 6 | 11 | 5020 | 75 | 49 | 26 | 1 | 15 | 12 | 1 | 1 | 10 | 0 | 6 | 5 | 1 | 9 |

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** SOUTHEAST
**MINOR BASIN** PERDIDO ESCAMBIA RIVERS
**STATION LOCATION** ESCAMBIA RIVER AT
CENTURY, FLORIDA

62

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULEATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 11 | 19 | 61 | 17.0 | 7.0 | 6.7 | 2.1 | 46 | 1.9 | 5.4 | .4 | 8 | 26 | 32 | 20 | 130 | 7 | .2 | 77 | - |
| 11 | 21 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2100 |
| 12 | 4 | 61 | 14.0 | 8.2 | 6.6 | 1.7 | 52 | - | - | .3 | 8 | 28 | 39 | 30 | 140 | 10 | .1 | 83 | 2700 |
| 12 | 18 | 61 | 12.0 | 9.2 | 6.7 | 2.1 | 36 | - | - | .1 | 10 | 30 | 34 | 20 | 110 | 8 | .2 | 72 | - |
| 1 | 15 | 62 | 8.0 | 9.5 | 6.5 | 1.8 | 47 | - | - | .2 | 11 | 25 | 36 | 10 | 80 | 11 | .1 | 80 | - |
| 1 | 29 | 62 | 10.0 | 9.4 | 6.8 | 1.4 | 59 | - | - | .7 | 9 | 33 | 42 | 40 | 260 | 14 | .4 | - | - |
| 2 | 12 | 62 | 13.0 | 9.1 | 6.7 | 1.2 | 44 | - | - | .4 | 8 | 36 | 47 | 10 | 50 | 9 | .2 | 69 | 1600 |
| 4 | 23 | 62 | - | 8.8 | 6.7 | 1.7 | 32 | - | - | .2 | - | 29 | 34 | 30 | 55 | - | - | 89 | - |
| 5 | 7 | 62 | - | 8.6 | 6.8 | 2.1 | 37 | - | - | .5 | 90 | 27 | 41 | 25 | 60 | - | - | 79 | - |
| 5 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 7000 |
| 5 | 21 | 62 | 22.0 | 7.7 | 6.7 | 1.9 | 29 | - | - | .4 | 87 | 30 | 35 | 50 | 45 | - | - | 72 | - |
| 6 | 4 | 62 | 25.0 | 6.6 | 6.9 | 2.4 | 49 | - | - | .5 | 93 | 26 | 37 | 40 | 70 | - | - | 84 | 1300 |
| 6 | 18 | 62 | 25.0 | 6.9 | 6.8 | 2.2 | 41 | - | - | .3 | 100 | 31 | 39 | 45 | 100 | - | - | 92 | - |
| 8 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4400 |

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Century, Florida
Operated by U.S. Geological Survey

MINOR BASIN Perdido-Escambia Rivers

STATION LOCATION Escambia River at
Century, Florida

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.100 | 1.400 | 3.150 | 5.930 | 7.000 | 12.100 | 37.000 | 12.200 | 2.640 | 3.160 | 2.980 | 1.320 |
| 2 | 1.890 | 1.360 | 2.840 | 6.380 | 6.520 | 13.000 | 42.400 | 9.470 | 2.600 | 2.450 | 2.250 | 1.330 |
| 3 | 1.840 | 1.340 | 2.610 | 6.010 | 6.130 | 15.800 | 38.300 | 7.420 | 2.790 | 2.200 | 1.900 | 1.220 |
| 4 | 1.920 | 1.500 | 2.540 | 5.420 | 5.790 | 18.000 | 32.400 | 6.240 | 3.200 | 1.900 | 1.910 | 1.140 |
| 5 | 1.840 | 1.600 | 2.360 | 5.390 | 5.700 | 18.500 | 29.600 | 5.600 | 2.950 | 1.710 | 1.880 | 1.130 |
| 6 | 1.790 | 1.700 | 2.570 | 9.960 | 5.680 | 17.600 | 29.200 | 4.980 | 2.740 | 1.780 | 1.850 | 1.160 |
| 7 | 1.710 | 1.760 | 2.740 | 15.100 | 5.950 | 15.800 | 31.500 | 4.400 | 2.740 | 2.240 | 1.790 | 1.370 |
| 8 | 1.700 | 1.660 | 2.700 | 17.000 | 5.820 | 13.100 | 34.100 | 4.050 | 2.510 | 2.820 | 1.690 | 1.590 |
| 9 | 1.690 | 1.770 | 2.420 | 16.400 | 5.370 | 10.900 | 31.400 | 3.860 | 2.270 | 2.900 | 1.520 | 1.570 |
| 10 | 1.650 | 1.750 | 3.430 | 16.000 | 5.370 | 9.420 | 26.000 | 3.430 | 2.220 | 2.720 | 1.380 | 1.540 |
| 11 | 1.660 | 1.680 | 8.920 | 15.700 | 5.310 | 8.470 | 21.500 | 3.220 | 2.430 | 2.250 | 1.280 | 1.460 |
| 12 | 1.580 | 1.510 | 12.900 | 15.000 | 5.020 | 8.040 | 18.400 | 3.140 | 3.060 | 1.870 | 1.230 | 1.370 |
| 13 | 1.560 | 1.500 | 16.500 | 14.200 | 4.810 | 8.180 | 16.400 | 3.000 | 3.540 | 1.780 | 1.210 | 1.610 |
| 14 | 1.520 | 1.870 | 17.600 | 13.100 | 4.230 | 8.060 | 14.800 | 2.800 | 3.290 | 1.750 | 1.220 | 1.780 |
| 15 | 1.500 | 3.010 | 19.200 | 11.100 | 4.050 | 8.030 | 13.600 | 2.730 | 2.700 | 1.760 | 1.280 | 1.650 |
| 16 | 1.460 | 6.180 | 21.200 | 9.170 | 6.100 | 8.060 | 12.200 | 2.450 | 2.600 | 2.140 | 1.700 | 1.460 |
| 17 | 1.480 | 9.220 | 22.900 | 8.020 | 5.520 | 7.880 | 11.300 | 2.400 | 2.500 | 2.780 | 2.850 | 1.510 |
| 18 | 1.380 | 8.830 | 24.300 | 7.330 | 5.100 | 7.540 | 10.800 | 2.470 | 2.320 | 2.920 | 2.090 | 2.020 |
| 19 | 1.390 | 5.640 | 23.800 | 7.100 | 14.700 | 7.210 | 10.800 | 2.450 | 2.360 | 2.280 | 2.180 | 2.400 |
| 20 | 1.360 | 4.270 | 22.400 | 7.140 | 20.400 | 6.860 | 10.300 | 2.510 | 2.540 | 1.900 | 2.300 | 2.400 |
| 21 | 1.330 | 3.730 | 20.600 | 7.530 | 19.600 | 6.320 | 8.840 | 2.270 | 2.520 | 1.700 | 2.180 | 2.470 |
| 22 | 1.320 | 3.200 | 18.500 | 7.630 | 17.000 | 6.090 | 7.510 | 2.290 | 3.130 | 1.580 | 2.070 | 2.600 |
| 23 | 1.270 | 3.540 | 16.000 | 7.380 | 15.400 | 5.970 | 6.610 | 2.180 | 3.170 | 1.460 | 1.940 | 2.330 |
| 24 | 1.340 | 5.080 | 13.200 | 7.010 | 15.800 | 6.020 | 6.030 | 1.980 | 2.900 | 1.420 | 1.760 | 1.810 |
| 25 | 1.420 | 5.550 | 10.700 | 6.850 | 16.500 | 5.820 | 5.700 | 1.860 | 3.310 | 1.460 | 1.580 | 1.590 |
| 26 | 1.360 | 4.580 | 8.350 | 6.570 | 15.500 | 6.850 | 5.500 | 1.800 | 3.480 | 1.630 | 1.480 | 1.470 |
| 27 | 1.300 | 4.110 | 7.090 | 6.410 | 14.200 | 7.710 | 5.140 | 1.800 | 2.670 | 1.660 | 1.400 | 1.440 |
| 28 | 1.280 | 3.930 | 6.820 | 7.110 | 12.900 | 6.870 | 5.260 | 1.740 | 2.390 | 1.840 | 1.320 | 1.580 |
| 29 | 1.330 | 4.040 | 6.720 | 7.760 |  | 6.000 | 9.630 | 1.590 | 2.410 | 2.200 | 1.360 | 1.720 |
| 30 | 1.280 | 3.630 | 6.230 | 7.800 |  | 5.590 | 12.800 | 1.690 | 3.100 | 2.880 | 1.370 | 1.520 |
| 31 | 1.340 |  | 5.900 | 7.510 |  | 14.700 |  | 1.800 |  | 3.260 | 1.320 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** NEW YORK

**MAJOR BASIN** NORTHEAST

**MINOR BASIN** LAKE ERIE-NIAGARA RIVER

**STATION LOCATION** LAKE ERIE AT
BUFFALO, NEW YORK

14

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 4 | 61 | 10 | 16 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 4 | 9 | 6 | 13 | 7 | | | | | | |
| 10 | 11 | 61 | 10 | 23 | - | - | - | - | - | - | 3 | 5 | 4 | 7 | 7 | 9 | | | | | | |
| 10 | 18 | 61 | 10 | 30 | - | - | - | - | - | - | 3 | 6 | 7 | 6 | 10 | 8 | | | | | | |
| 11 | 1 | 61 | 11 | 16 | - | - | - | - | - | - | 12 | 7 | 17 | 7 | 29 | 10 | | | | | | |
| 11 | 8 | 61 | 11 | 16 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 4 | 4 | 5 | 6 | 6 | | | | | | |
| 11 | 15 | 61 | 11 | 28 | - | - | - | - | - | - | 0 | 4 | 6 | 5 | 6 | 6 | | | | | | |
| 11 | 22 | 61 | 11 | 30 | - | - | - | - | - | - | 2 | 5 | 7 | 7 | 9 | 8 | | | | | | |
| 11 | 29 | 61 | 12 | 7 | - | - | - | - | - | - | 15 | 6 | 11 | 7 | 26 | 9 | | | | | | |
| 12 | 6 | 61 | 12 | 13 | 1 | 1 | 0 | 1 | 1 | 1 | 22 | 6 | 8 | 5 | 30 | 8 | | | | | | |
| 12 | 13 | 61 | 12 | 19 | - | - | - | - | - | - | 12 | 6 | 13 | 7 | 25 | 9 | | | | | | |
| 12 | 21 | 61 | 12 | 28 | - | - | - | - | - | - | 2 | 6 | 10 | 7 | 12 | 9 | | | | | | |
| 1 | 3 | 62 | 1 | 10 | 1 | 1 | 1 | 1 | 2 | 1 | 6 | 4 | 12 | 5 | 18 | 7 | | | | | | |
| 1 | 10 | 62 | 1 | 19 | - | - | - | - | - | - | 38 | 7 | 11 | 5 | 49 | 9 | | | | | | |
| 1 | 17 | 62 | 1 | 25 | - | - | - | - | - | - | 14 | 6 | 8 | 7 | 22 | 9 | | | | | | |
| 1 | 24 | 62 | 2 | 2 | - | - | - | - | - | - | 34 | 11 | 7 | 7 | 41 | 13 | | | | | | |
| 1 | 31 | 62 | 2 | 8 | - | - | - | - | - | - | 7 | 6 | 8 | 7 | 15 | 9 | | | | | | |
| 2 | 8 | 62 | 2 | 16 | 17 | 8 | 0 | 1 | 17 | 8 | 67 | 11 | 16 | 5 | 83 | 12 | | | | | | |
| 2 | 14 | 62 | 2 | 23 | - | - | - | - | - | - | 3 | 5 | 5 | 7 | 8 | 9 | | | | | | |
| 2 | 21 | 62 | 3 | 2 | - | - | - | - | - | - | 3 | 5 | 9 | 7 | 12 | 9 | | | | | | |
| 2 | 28 | 62 | 3 | 12 | - | - | - | - | - | - | 1 | 6 | 9 | 8 | 10 | 10 | | | | | | |
| 3 | 7 | 62 | 3 | 16 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 4 | 7 | 5 | 12 | 6 | | | | | | |
| 3 | 14 | 62 | 3 | 23 | - | - | - | - | - | - | 12 | 6 | 24 | 7 | 36 | 9 | | | | | | |
| 3 | 21 | 62 | 3 | 30 | - | - | - | - | - | - | 4 | 5 | 7 | 7 | 11 | 9 | | | | | | |
| 3 | 28 | 62 | 4 | 6 | - | - | - | - | - | - | 22 | 4 | 36 | 5 | 58 | 6 | | | | | | |
| 4 | 4 | 62 | 4 | 17 | 0 | 1 | 0 | 1 | 0 | 1 | 24 | 6 | 15 | 7 | 39 | 8 | | | | | | |
| 4 | 11 | 62 | 4 | 24 | - | - | - | - | - | - | 4 | 4 | 15 | 5 | 19 | 6 | | | | | | |
| 4 | 18 | 62 | 4 | 30 | - | - | - | - | - | - | 7 | 5 | 19 | 7 | 26 | 9 | | | | | | |
| 4 | 25 | 62 | 3 | 25 | - | - | - | - | - | - | 1 | 7 | 19 | 9 | 20 | 11 | | | | | | |
| 5 | 2 | 62 | 5 | 25 | - | - | - | - | - | - | 21 | 7 | 14 | 9 | 35 | 11 | | | | | | |
| 5 | 8 | 62 | 6 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 14 | 7 | 24 | 9 | | | | | | |
| 5 | 17 | 62 | 6 | 22 | - | - | - | - | - | - | 5 | 6 | 14 | 9 | 19 | 11 | | | | | | |
| 5 | 23 | 62 | 6 | 27 | - | - | - | - | - | - | 20 | 7 | 13 | 8 | 33 | 11 | | | | | | |
| 5 | 31 | 62 | 7 | 3 | - | - | - | - | - | - | 19 | 5 | 13 | 6 | 32 | 8 | | | | | | |
| 6 | 6 | 62 | 7 | 6 | 0 | 0 | 1 | 1 | 1 | 1 | 13 | 5 | 15 | 7 | 28 | 9 | | | | | | |
| 6 | 13 | 62 | 7 | 10 | - | - | - | - | - | - | 4 | 5 | 11 | 7 | 15 | 9 | | | | | | |
| 6 | 20 | 62 | 7 | 12 | - | - | - | - | - | - | 2 | 5 | 12 | 8 | 14 | 9 | | | | | | |
| 6 | 27 | 62 | 7 | 23 | - | - | - | - | - | - | 42 | 5 | 11 | 6 | 53 | 7 | | | | | | |
| 7 | 5 | 62 | 8 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 7 | 9 | 8 | 14 | 11 | | | | | | |
| 7 | 11 | 62 | 8 | 7 | - | - | - | - | - | - | 4 | 5 | 20 | 9 | 24 | 10 | | | | | | |
| 7 | 18 | 62 | 8 | 2 | - | - | - | - | - | - | 1 | 6 | 13 | 8 | 14 | 10 | | | | | | |
| 7 | 25 | 62 | 8 | 9 | - | - | - | - | - | - | 46 | 7 | 13 | 7 | 59 | 10 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** NEW YORK

**MAJOR BASIN** NORTHEAST

**MINOR BASIN** LAKE ERIE-NIAGARA RIVER

**STATION LOCATION** LAKE ERIE AT
BUFFALO, NEW YORK

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | | | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 8 | 1 | 62 | 8 | 21 | - | - | - | - | - | - | 36 | 7 | 9 | 7 | 45 | 10 | | | | | | | | |
| 8 | 8 | 62 | 8 | 28 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 5 | 13 | 7 | 20 | 8 | | | | | | | | |
| 8 | 15 | 62 | 8 | 29 | - | - | - | - | - | - | 28 | 6 | 9 | 7 | 37 | 9 | | | | | | | | |
| 8 | 22 | 62 | 9 | 4 | - | - | - | - | - | - | 22 | 4 | 6 | 5 | 28 | 6 | | | | | | | | |
| 8 | 29 | 62 | 9 | 24 | - | - | - | - | - | - | 17 | 7 | 6 | 10 | 23 | 12 | | | | | | | | |
| 9 | 5 | 62 | 9 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 5 | 9 | 7 | 11 | | | | | | | | |
| 9 | 12 | 62 | 10 | 9 | - | - | - | - | - | - | 14 | 7 | 13 | 7 | 27 | 10 | | | | | | | | |
| 9 | 19 | 62 | 10 | 10 | - | - | - | - | - | - | 34 | 26 | 13 | 7 | 47 | 27 | | | | | | | | |
| 9 | 26 | 62 | 10 | 17 | - | - | - | - | - | - | 19 | 6 | 12 | 7 | 31 | 9 | | | | | | | | |

STATION LOCATION LAKE ERIE AT

BUFFALO, NEW YORK

| DATE OF SAMPLE | | | ALGAE (Number per milliliter) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 4 | 61 | 400 | 40 | 0 | 40 | 0 | 40 | 0 | 170 | 60 | 0 | 0 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 10 | 18 | 61 | 200 | 0 | 0 | 20 | 0 | 0 | 0 | 60 | 80 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 1 | 61 | 300 | 0 | 0 | 80 | 0 | 0 | 20 | 100 | 100 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 11 | 15 | 61 | 200 | 20 | 0 | 40 | 0 | 0 | 0 | 60 | 40 | 20 | 40 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 1000 | 0 | 0 | 130 | 0 | 40 | 0 | 580 | 230 | 60 | 230 | 71 | 2 | 69 | 1 | | | | | | | | | | | | | | | | |
| 12 | 21 | 61 | 600 | 0 | 0 | 20 | 0 | 0 | 0 | 350 | 190 | 0 | 40 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 3 | 62 | 700 | 0 | 0 | 90 | 0 | 0 | 70 | 430 | 160 | 110 | 20 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 1 | 17 | 62 | 500 | 50 | 0 | 50 | 0 | 50 | 0 | 290 | 20 | 70 | 0 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 8 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 20 | 20 | 50 | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 7 | 62 | 100 | 20 | 0 | 20 | 0 | 0 | 20 | 80 | 0 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 3 | 22 | 62 | 100 | 0 | 0 | 20 | 0 | 40 | 0 | 20 | 0 | 50 | 0 | | | | | | | | | | | | | | | | | | | | |
| 4 | 4 | 62 | 300 | 0 | 0 | 0 | 0 | 0 | 20 | 290 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 4 | 18 | 62 | 4300 | 0 | 0 | 0 | 0 | 40 | 150 | 4080 | 0 | 390 | 0 | 71 | 5 | | | | | | | | | | | | | | | | | | |
| 5 | 2 | 62 | 1900 | 0 | 0 | 330 | 0 | 310 | 390 | 770 | 100 | 150 | 20 | 71 | 3 | 63 | 2 | 51 | 1 | 25 | 1 | | | | | | | | | | | | |
| 5 | 17 | 62 | 500 | 0 | 0 | 150 | 0 | 0 | 60 | 370 | 0 | 60 | 0 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 5 | 31 | 62 | 300 | 0 | 60 | 0 | 0 | 0 | 0 | 190 | 20 | 130 | 0 | | | | | | | | | | | | | | | | | | | | |
| 6 | 20 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 7 | 5 | 62 | 100 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 40 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 8 | 1 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 40 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 15 | 62 | 900 | 120 | 40 | 520 | 80 | 0 | 40 | 40 | 80 | 0 | 40 | 44 | 2 | | | | | | | | | | | | | | | | | | |
| 9 | 5 | 62 | 300 | 40 | 0 | 0 | 0 | 0 | 0 | 210 | 80 | 80 | 0 | | | | | | | | | | | | | | | | | | | | |
| 9 | 19 | 62 | 700 | 0 | 100 | 20 | 0 | 0 | 20 | 170 | 410 | 40 | 40 | | | | | | | | | | | | | | | | | | | | |

NATIONAL WATER QUALITY NETWORK

# PLANKTON POPULATION

STATE NEW YORK

MAJOR BASIN NORTHEAST

MINOR BASIN LAKE ERIE-NIAGARA RIVER

STATION LOCATION LAKE ERIE AT

BUFFALO, NEW YORK 014

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUM-BER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | NUM-BER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) 1ST | | 2ND | | 3RD | | | |
| ONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 0 | 4 | 61 | 59 | 30 | 83 | 29 | 47 | 17 | 80 | 7 | 17 | 0 | 0 | 251 | 11 | 5 | 17 | 5 | | | | | | | 12 | 51 | 1 | | | | | 0 | 0 |
| 0 | 18 | 61 | 45 | 39 | 83 | 25 | 47 | 18 | 95 | 14 | 4 | 0 | 0 | 48 | 17 | 3 | 11 | 2 | | | | | | | 5 | 51 | 1 | | | | | 0 | 0 |
| 1 | 1 | 61 | 45 | 33 | 83 | 30 | 47 | 17 | 59 | 5 | 15 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 61 | 59 | 34 | 45 | 18 | 47 | 18 | 83 | 17 | 13 | 20 | 0 | 22 | 17 | 1 | 11 | 1 | | | | | | | 3 | | | | | | | 0 | 0 |
| 2 | 4 | 61 | 59 | 39 | 83 | 37 | 47 | 13 | 45 | 7 | 4 | 0 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 21 | 61 | 83 | 41 | 59 | 30 | 80 | 16 | 47 | 5 | 8 | 0 | 0 | 1 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 1 | 3 | 62 | 59 | 54 | 83 | 19 | 80 | 12 | 45 | 7 | 8 | 90 | 0 | 2 | | | | | | | | | | | 13 | 51 | 3 | | | | | 0 | 0 |
| 1 | 17 | 62 | 59 | 80 | 83 | 9 | 80 | 6 | 95 | 2 | 3 | 0 | 0 | 10 | 17 | 1 | | | | | | | | | 6 | 76 | 1 | | | | | 0 | 0 |
| 2 | 8 | 62 | 59 | 51 | 80 | 25 | 95 | 8 | 9 | 7 | 9 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 21 | 62 | 59 | 44 | 80 | 20 | 83 | 12 | 47 | 9 | 15 | 0 | 0 | 1 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 3 | 7 | 62 | 80 | 40 | 82 | 14 | 9 | 13 | 83 | 13 | 20 | 390 | 10 | 2 | | | | | | | | | | | 4 | 76 | 1 | | | | | 0 | 0 |
| 3 | 22 | 62 | 9 | 24 | 83 | 23 | 59 | 22 | 95 | 6 | 25 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 4 | 62 | 82 | 47 | 45 | 15 | 59 | 9 | 95 | 7 | 23 | 0 | 10 | 0 | | | | | | | | | | | 4 | 76 | 1 | | | | | 0 | 0 |
| 4 | 18 | 62 | 82 | 66 | 9 | 15 | 83 | 4 | 80 | 3 | 12 | 0 | 20 | 5 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 2 | 62 | 83 | 59 | 59 | 12 | 82 | 8 | 95 | 5 | 16 | 20 | 20 | 7 | | | | | | | | | | | 8 | 76 | 2 | | | | | [illegible] | [illegible] |
| 5 | 17 | 62 | 83 | 45 | 59 | 19 | 47 | 10 | 95 | 8 | 18 | 0 | 0 | 81 | 21 | 3 | 14 | 3 | 11 | | | | | | | | | | | | | | |
| 5 | 31 | 62 | 83 | 50 | 80 | 10 | 95 | 5 | 59 | 5 | 30 | 80 | 0 | 314 | 11 | 6 | 17 | 3 | 10 | | | | | | | | | | | | | | |
| 6 | 20 | 62 | 83 | 36 | 59 | 20 | 80 | 14 | 45 | 9 | 21 | 0 | 0 | 234 | 11 | 6 | 17 | 3 | 10 | 1 | | | | | | | | | | | | | |
| 7 | 5 | 62 | | | | | | | | | | 0 | 10 | 1260 | 22 | 7 | 11 | 7 | 2 | 6 | 17 | 5 | 21 | 4 | | | | | | | | | |
| 8 | 1 | 62 | 47 | 79 | 83 | 10 | 80 | 4 | 95 | 2 | 5 | 0 | 0 | 107 | 17 | 5 | 11 | 3 | | | | | | | | | | | | | | | |
| 8 | 15 | 62 | 47 | 54 | 95 | 36 | 82 | 3 | 83 | 3 | 4 | 0 | 0 | 282 | 17 | 6 | 11 | 4 | 5 | 1 | 22 | 1 | | | | | | | | | | | |
| 9 | 5 | 62 | 95 | 55 | 82 | 14 | 47 | 9 | 80 | 4 | 18 | 0 | 0 | 385 | 17 | 6 | 11 | 5 | 22 | 3 | 10 | 2 | 21 | 1 | | | | | | | | | |
| 9 | 19 | 62 | 45 | 34 | 95 | 34 | 59 | 9 | 83 | 4 | 19 | 0 | 0 | 334 | 17 | 6 | 11 | 3 | 5 | 2 | 46 | 1 | | | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**MAJOR BASIN** NORTHEAST

**MINOR BASIN** LAKE ERIE-NIAGARA RIVER

**STATION LOCATION** LAKE ERIE AT
BUFFALO, NEW YORK

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 9 | 29 | 61 | 10 | 9 | 4965 | 146 | 30 | 116 | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 8 | 61 | 11 | 17 | 4500 | 149 | 34 | 115 | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 27 | 61 | 12 | 6 | 3712 | 230 | 53 | 177 | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 27 | 61 | | * | 13177 | 171 | 38 | 133 | 2 | 10 | 13 | 3 | 2 | 8 | 0 | 4 | 2 | 1 | 6 |
| 1 | 2 | 62 | 1 | 9 | 2610 | 213 | 64 | 149 | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 31 | 62 | 2 | 7 | 4500 | 149 | 44 | 105 | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 21 | 62 | 3 | 1 | 5062 | 143 | 34 | 109 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 20 | 62 | 3 | 28 | 5212 | 150 | 32 | 118 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 20 | 62 | | * | 17384 | 157 | 41 | 116 | 3 | 12 | 11 | 1 | 1 | 9 | 0 | 4 | 4 | 1 | 6 |
| 4 | 11 | 62 | 4 | 19 | 4955 | 137 | 32 | 105 | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 15 | 62 | 5 | 22 | 4910 | 156 | 60 | 96 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 12 | 62 | 6 | 21 | 6825 | 148 | 47 | 101 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 12 | 62 | | * | 16690 | 147 | 46 | 101 | 2 | 14 | 14 | 2 | 1 | 10 | 1 | 6 | 4 | 1 | 5 |
| 7 | 11 | 62 | 7 | 19 | 4725 | 192 | 69 | 123 | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 3 | 62 | 8 | 10 | 4500 | 218 | 78 | 140 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 4 | 62 | 9 | 14 | 4650 | 176 | 56 | 120 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 4 | 62 | | * | 13875 | 195 | 68 | 127 | 3 | 18 | 20 | 3 | 3 | 14 | 0 | 8 | 6 | 1 | 12 |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** NEW YORK
**MAJOR BASIN** NORTHEAST
**MINOR BASIN** LAKE ERIE-NIAGARA RIVER
**STATION LOCATION** LAKE ERIE AT
BUFFALO, NEW YORK 14

| E<br>YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 61 | 17.5 | 8.7 | 8.2 | .7 | 8 | .2 | 1.4 | .0 | 20 | 88 | 126 | 0 | 5 | 23 | .1 | 207 | 8 |
| 61 | 19.5 | 9.C | 8.4 | 1.0 | 6 | .2 | - | .0 | 25 | 90 | 126 | 0 | 5 | 23 | .1 | 210 | *4 |
| 61 | 17.0 | 9.0 | 8.3 | 1.3 | 9 | .2 | 1.2 | .0 | 23 | 92 | 128 | 0 | 27 | 21 | .1 | 196 | 680 |
| 61 | 14.8 | 9.4 | 8.0 | 1.6 | 9 | .4 | 1.7 | .0 | 23 | 88 | 126 | 0 | 50 | 20 | .1 | 207 | *40 |
| 61 | 13.0 | 9.8 | 8.1 | 1.2 | 9 | .2 | 1.2 | .0 | 23 | 90 | 126 | 0 | 15 | 22 | .0 | 196 | 24 |
| 61 | 12.0 | 10.3 | 8.1 | 1.3 | 9 | .4 | 1.5 | .0 | 23 | 90 | 130 | 0 | 10 | 21 | .1 | 191 | 8 |
| 61 | 9.0 | 10.5 | 8.4 | 1.2 | 7 | .2 | - | - | 20 | 90 | 130 | 0 | 2 | 22 | .1 | 200 | *4 |
| 61 | 9.0 | 11.0 | 8.2 | 2.0 | 5 | .2 | 1.7 | .0 | 20 | 90 | 130 | 0 | 15 | 22 | .1 | 192 | 12 |
| 61 | 7.3 | 10.6 | 8.1 | 2.5 | 7 | .2 | 1.8 | .0 | 23 | 88 | 128 | 0 | 50 | 21 | .1 | 196 | 40 |
| 61 | 8.0 | 10.8 | 8.1 | 3.2 | 10 | .8 | 1.7 | .0 | 20 | 84 | 132 | 0 | 75 | 22 | .1 | 187 | *4 |
| 61 | 6.0 | 12.4 | 8.1 | 1.2 | 7 | .2 | 2.1 | .0 | 20 | 90 | 120 | 0 | 15 | 23 | .1 | 196 | 30 |
| 62 | 4.5 | 13.0 | 8.1 | 2.7 | 7 | .2 | 1.8 | .1 | 23 | 90 | 132 | 0 | 50 | 22 | .1 | 208 | 60 |
| 62 | 4.0 | 13.5 | 8.2 | 1.2 | 6 | .6 | 2.2 | .0 | 20 | - | 126 | 0 | 50 | 21 | .1 | 187 | 20 |
| 62 | 5.5 | 13.4 | 8.1 | .6 | 5 | .8 | 2.2 | .0 | 23 | 90 | 136 | 0 | 20 | 22 | .1 | 208 | 4900 |
| 62 | 4.0 | 14.0 | 8.0 | 1.2 | 9 | .4 | 2.0 | .0 | 23 | 88 | 134 | 0 | 20 | 23 | .1 | 190 | 20 |
| 62 | 3.5 | 14.2 | 8.1 | .6 | 11 | .2 | 1.2 | .0 | 23 | 86 | 134 | 0 | 18 | 24 | .1 | 193 | *4 |
| 62 | 3.5 | 14.2 | 8.0 | .6 | 11 | .2 | 1.9 | .0 | 20 | 88 | 136 | 0 | 10 | 20 | .1 | 187 | *4 |
| 62 | 4.5 | 13.6 | 8.1 | 1.5 | 9 | .7 | 1.7 | .0 | 20 | 88 | 138 | 0 | 5 | 22 | .1 | 200 | *4 |
| 62 | 3.0 | 13.0 | 8.0 | - | 8 | .7 | - | .0 | 20 | 90 | 136 | 0 | 2 | 22 | .1 | 199 | - |
| 62 | 5.0 | 12.4 | 8.1 | .8 | 8 | .2 | 1.2 | .0 | 23 | 88 | 134 | 0 | 2 | 22 | .1 | 186 | - |
| 62 | 5.0 | 13.4 | 8.1 | 1.0 | 7 | .2 | 1.3 | .0 | 20 | 86 | 138 | 0 | 2 | 22 | .1 | 190 | *4 |
| 62 | 4.0 | 12.6 | 8.1 | .9 | 10 | .2 | 2.0 | .0 | 18 | 86 | 130 | 0 | 25 | 21 | .1 | 130 | *4 |
| 62 | 3.5 | 13.0 | 8.1 | 1.4 | 12 | .2 | 1.6 | .0 | 20 | 80 | 134 | 0 | 5 | 21 | .1 | 185 | 4 |
| 62 | 5.0 | 13.3 | 7.7 | 2.0 | 7 | .2 | 1.2 | .0 | 20 | 84 | 140 | 0 | 2 | 22 | .1 | 189 | - |
| 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *4 |
| 62 | 4.0 | 13.7 | 8.2 | 1.5 | 7 | .2 | 1.9 | .0 | 20 | 88 | 120 | 0 | 10 | 22 | .1 | 200 | *4 |
| 62 | 7.0 | 13.0 | 8.0 | 2.0 | 11 | .2 | 1.2 | .0 | 20 | 88 | 130 | 0 | 5 | 18 | .1 | 185 | - |
| 62 | 7.0 | 13.9 | 8.1 | 2.0 | 5 | .2 | 1.1 | .0 | 20 | 80 | 132 | 0 | 2 | 13 | .1 | 188 | *4 |
| 62 | 5.0 | 12.8 | 8.2 | 3.5 | 5 | .2 | 2.2 | .0 | 20 | 80 | 110 | 0 | 5 | 17 | .1 | 170 | *4 |
| 62 | 10.0 | 13.7 | 8.2 | 3.0 | 6 | .7 | 2.6 | .0 | 23 | 80 | 120 | 0 | 10 | 20 | .1 | 192 | 360 |
| 62 | 10.0 | 12.5 | 8.2 | 2.3 | 8 | .6 | 2.5 | .0 | 20 | 96 | 134 | 0 | 10 | 21 | .1 | 208 | 1800 |
| 62 | 14.0 | 13.0 | 8.2 | 1.3 | 6 | .6 | 2.6 | .0 | 20 | 90 | 128 | 0 | 2 | 21 | .1 | 198 | *4 |
| 62 | 16.5 | 12.0 | 8.3 | .9 | 8 | .8 | 1.6 | .0 | 23 | 86 | 138 | 0 | 5 | 21 | .1 | 193 | *4 |
| 62 | 17.0 | 10.0 | 8.4 | 2.4 | 5 | .8 | 2.4 | .0 | 23 | 96 | 136 | 0 | 5 | 21 | .1 | 189 | - |
| 62 | 18.0 | 10.2 | 8.4 | 2.5 | 5 | .4 | 1.2 | .0 | 20 | 88 | 132 | 0 | 5 | 22 | .1 | 174 | 350 |
| 62 | 17.0 | 10.0 | 8.3 | 4.7 | 11 | .2 | 1.8 | .0 | 20 | 88 | 128 | 0 | 2 | 20 | .1 | 187 | *40 |
| 62 | 18.0 | 9.2 | 8.3 | 1.7 | 5 | .4 | 1.8 | .0 | 20 | 88 | 126 | 0 | 5 | 22 | .1 | 199 | - |
| 62 | 20.0 | 9.0 | 8.2 | 1.4 | 6 | .7 | 1.7 | .0 | 18 | 88 | 128 | 0 | 2 | 23 | .1 | 182 | - |
| 62 | 22.0 | 9.2 | 8.3 | 1.6 | 4 | .8 | 2.6 | .0 | 20 | 88 | 126 | 0 | 2 | 21 | .1 | 186 | - |

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** NEW YORK
**MAJOR BASIN** NORTHEAST
**MINOR BASIN** LAKE ERIE-NIAGARA RIVER
**STATION LOCATION** LAKE ERIE AT
BUFFALO, NEW YORK

14

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 11 | 62 | 21.5 | 9.0 | 8.3 | 3.8 | 16 | 1.8 | 2.7 | .0 | 18 | 88 | 130 | 0 | 2 | 21 | .1 | 181 | *40 |
| 7 | 18 | 62 | 22.0 | 8.7 | 8.3 | 1.7 | 19 | 1.2 | 2.4 | .0 | 23 | 80 | 130 | 0 | 2 | 21 | .1 | 198 | *4 |
| 7 | 25 | 62 | 23.0 | 8.5 | 8.4 | 3.5 | 10 | 1.2 | 2.9 | .0 | 23 | 88 | 132 | 0 | 2 | 21 | .1 | 194 | 11 |
| 8 | 1 | 62 | 22.0 | 8.6 | 8.3 | 1.0 | 13 | .8 | 2.6 | .0 | 18 | 84 | 136 | 0 | 2 | 22 | .1 | 216 | *10 |
| 8 | 8 | 62 | 23.0 | 8.5 | 8.4 | 2.4 | 17 | .9 | 1.6 | .0 | 20 | 86 | 132 | 0 | 2 | 22 | .2 | 186 | *10 |
| 8 | 15 | 62 | 23.0 | 8.2 | 8.3 | .7 | 12 | .9 | 1.9 | .0 | 23 | 88 | 132 | 0 | 5 | 23 | .1 | 183 | - |
| 8 | 22 | 62 | 23.0 | 9.6 | 8.4 | 3.6 | 15 | .8 | 1.9 | .0 | 23 | 84 | - | 0 | 2 | 23 | .1 | 192 | - |
| 8 | 29 | 62 | 23.0 | 8.7 | 8.3 | 2.1 | 9 | .9 | 2.6 | .0 | 20 | 80 | 126 | 0 | 0 | 22 | .1 | 207 | - |
| 9 | 5 | 62 | 21.0 | 8.3 | 8.3 | 1.0 | 13 | .8 | 2.2 | .0 | 20 | 84 | 128 | 0 | 2 | 21 | .1 | 185 | 380 |
| 9 | 12 | 62 | 21.0 | 8.1 | 8.3 | 1.7 | 14 | 2.2 | 3.0 | .0 | 20 | 88 | 128 | 0 | 37 | 22 | .1 | 233 | 85 |
| 9 | 19 | 62 | 20.0 | 8.4 | 8.3 | 1.7 | 11 | .8 | 2.9 | .0 | 23 | 88 | 138 | 0 | 30 | 23 | .1 | 209 | 50 |
| 9 | 26 | 62 | 19.0 | 8.8 | 8.3 | - | 17 | .7 | 1.9 | .0 | 23 | 88 | 132 | 0 | 7 | 25 | .7 | 209 | 16 |

STREAM FLOW DATA - 1961-1962

Thousand cubic feet per second

PROVISIONAL--SUBJECT TO REVISION

Supplied by U.S. Army Corps of Engineers
U.S. Lake Survey

STATE New York

MAJOR BASIN Northeast

MINOR BASIN Lake Erie-Niagara River

STATION LOCATION Lake Erie at
Buffalo, New York

| October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|

FLOW DATA NOT APPLICABLE --- LAKE LEVELS ONLY

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** WESTERN GREAT LAKES

**MINOR BASIN** ST. CLAIR-DETROIT RIVERS

**STATION LOCATION** DETROIT RIVER AT
DETROIT, MICHIGAN 15

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 3 | 61 | 10 | 30 | – | – | – | – | – | – | 2 | 6 | 4 | 7 | 6 | 9 | | | | | | |
| 10 | 10 | 61 | 10 | 23 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 4 | 1 | 5 | 1 | 6 | | | | | | |
| 10 | 16 | 61 | 10 | 31 | – | – | – | – | – | – | 0 | 5 | 38 | 7 | 38 | 9 | | | | | | |
| 10 | 24 | 61 | 11 | 3 | – | – | – | – | – | – | 4 | 5 | 9 | 7 | 13 | 9 | | | | | | |
| 11 | 7 | 61 | 11 | 21 | – | – | – | – | – | – | 3 | 5 | 10 | 6 | 13 | 8 | | | | | | |
| 11 | 14 | 61 | 11 | 24 | 0 | 1 | 0 | 1 | 0 | 1 | 10 | 6 | 6 | 6 | 16 | 8 | | | | | | |
| 11 | 21 | 61 | 11 | 30 | – | – | – | – | – | – | 1 | 6 | 3 | 6 | 4 | 8 | | | | | | |
| 11 | 27 | 61 | 12 | 12 | – | – | – | – | – | – | 5 | 4 | 11 | 5 | 16 | 6 | | | | | | |
| 12 | 5 | 61 | 12 | 14 | – | – | – | – | – | – | 6 | 5 | 7 | 6 | 13 | 8 | | | | | | |
| 12 | 12 | 61 | 12 | 18 | 0 | 1 | 0 | 1 | 0 | 1 | 11 | 4 | 18 | 5 | 29 | 6 | | | | | | |
| 12 | 26 | 61 | 1 | 5 | – | – | – | – | – | – | 3 | 6 | 14 | 6 | 17 | 8 | | | | | | |
| 1 | 2 | 62 | 1 | 10 | – | – | – | – | – | – | 0 | 5 | 3 | 6 | 3 | 8 | | | | | | |
| 1 | 9 | 62 | 1 | 16 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 4 | 15 | 5 | 22 | 7 | | | | | | |
| 1 | 16 | 62 | 1 | 24 | – | – | – | – | – | – | 12 | 4 | 14 | 5 | 26 | 6 | | | | | | |
| 1 | 23 | 62 | 2 | 2 | – | – | – | – | – | – | 5 | 5 | 8 | 6 | 13 | 8 | | | | | | |
| 1 | 30 | 62 | 2 | 9 | – | – | – | – | – | – | 12 | 6 | 8 | 6 | 20 | 8 | | | | | | |
| 2 | 6 | 62 | 2 | 16 | – | – | – | – | – | – | 6 | 5 | 13 | 6 | 19 | 8 | | | | | | |
| 2 | 12 | 62 | 2 | 27 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 4 | 13 | 5 | 19 | 6 | | | | | | |
| 2 | 20 | 62 | 3 | 5 | – | – | – | – | – | – | 15 | 5 | 13 | 5 | 28 | 7 | | | | | | |
| 2 | 26 | 62 | 3 | 9 | – | – | – | – | – | – | 0 | 5 | 0 | 6 | 0 | 8 | | | | | | |
| 3 | 6 | 62 | 3 | 20 | – | – | – | – | – | – | 3 | 4 | 7 | 5 | 10 | 6 | | | | | | |
| 3 | 13 | 62 | 3 | 23 | 0 | 1 | 0 | 1 | 0 | 1 | 12 | 4 | 16 | 5 | 28 | 6 | | | | | | |
| 3 | 19 | 62 | 3 | 30 | – | – | – | – | – | – | 30 | 6 | 28 | 7 | 58 | 9 | | | | | | |
| 3 | 27 | 62 | 4 | 4 | – | – | – | – | – | – | 6 | 5 | 13 | 6 | 19 | 7 | | | | | | |
| 4 | 3 | 62 | 4 | 20 | – | – | – | – | – | – | 0 | 4 | 10 | 5 | 10 | 6 | | | | | | |
| 4 | 10 | 62 | 4 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 4 | 12 | 5 | 18 | 6 | | | | | | |
| 4 | 21 | 62 | 5 | 23 | – | – | – | – | – | – | 5 | 7 | 8 | 8 | 13 | 11 | | | | | | |
| 5 | 1 | 62 | 5 | 31 | – | – | – | – | – | – | 3 | 7 | 11 | 8 | 14 | 11 | | | | | | |
| 5 | 8 | 62 | 6 | 11 | – | – | – | – | – | – | 4 | 7 | 10 | 8 | 14 | 11 | | | | | | |
| 5 | 15 | 62 | 6 | 20 | 0 | 1 | 0 | 0 | 0 | 1 | 6 | 5 | 6 | 6 | 12 | 8 | | | | | | |
| 5 | 22 | 62 | 6 | 27 | – | – | – | – | – | – | 4 | 6 | 10 | 7 | 14 | 9 | | | | | | |
| 5 | 29 | 62 | 7 | 25 | – | – | – | – | – | – | 0 | 5 | 12 | 7 | 12 | 9 | | | | | | |
| 6 | 4 | 62 | 7 | 3 | – | – | – | – | – | – | 2 | 5 | 12 | 6 | 14 | 8 | | | | | | |
| 6 | 12 | 62 | 7 | 9 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 5 | 14 | 7 | 17 | 9 | | | | | | |
| 7 | 2 | 62 | 8 | 3 | – | – | – | – | – | – | 0 | 3 | 8 | 3 | 8 | 4 | | | | | | |
| 7 | 10 | 62 | 8 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 6 | 5 | 7 | 6 | | | | | | |
| 7 | 17 | 62 | 8 | 9 | – | – | – | – | – | – | 1 | 5 | 4 | 6 | 5 | 7 | | | | | | |
| 7 | 24 | 62 | 9 | 30 | – | – | – | – | – | – | 4 | 6 | 7 | 7 | 11 | 9 | | | | | | |
| 7 | 31 | 62 | 8 | 17 | – | – | – | – | – | – | 1 | 5 | 14 | 7 | 15 | 9 | | | | | | |
| 8 | 7 | 62 | 8 | 27 | – | – | – | – | – | – | 2 | 6 | 0 | 6 | 2 | 8 | | | | | | |
| 8 | 14 | 62 | 8 | 30 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 5 | 5 | 6 | 6 | 7 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 21 | 62 | 9 | 5 | - | - | - | - | - | - | 2 | 5 | 13 | 7 | 15 | 9 | | | | | | |
| 8 | 28 | 62 | 9 | 26 | - | - | - | - | - | - | 1 | 6 | 7 | 8 | 8 | 10 | | | | | | |
| 9 | 4 | 62 | 9 | 28 | - | - | - | - | - | - | 1 | 6 | 1 | 7 | 2 | 9 | | | | | | |
| 9 | 11 | 62 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 3 | 7 | 6 | 9 | | | | | | |
| 9 | 18 | 62 | 10 | 9 | - | - | - | - | - | - | 3 | 5 | 6 | 6 | 9 | 7 | | | | | | |
| 9 | 25 | 62 | 10 | 16 | - | - | - | - | - | - | 11 | 6 | 7 | 8 | 18 | 10 | | | | | | |

# PLANKTON POPULATION

STATE MICHIGAN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. CLAIR DETROIT RIVERS
STATION LOCATION DETROIT RIVER AT
DETROIT, MICHIGAN 15

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 3 | 61 | 100 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 50 | 0 | 70 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 300 | 0 | 0 | 20 | 0 | 0 | 0 | 80 | 170 | 20 | 80 | | | | | | | | | | | | | | | | | | | | |
| 11 | 7 | 61 | 300 | 0 | 0 | 60 | 0 | 0 | 20 | 150 | 80 | 20 | 40 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 700 | 0 | 0 | 40 | 0 | 0 | 0 | 150 | 520 | 100 | 100 | 84 | 1 | | | | | | | | | | | | | | | | | | |
| 12 | 5 | 61 | 300 | 0 | 0 | 20 | 0 | 70 | 20 | 20 | 180 | 160 | 420 | | | | | | | | | | | | | | | | | | | | |
| 12 | 19 | 61 | 300 | 0 | 0 | 0 | 0 | 20 | 0 | 120 | 170 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 500 | 70 | 0 | 50 | 20 | 0 | 0 | 110 | 200 | 70 | 20 | | | | | | | | | | | | | | | | | | | | |
| 1 | 16 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 110 | 20 | 90 | | | | | | | | | | | | | | | | | | | | |
| 2 | 6 | 62 | 300 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 270 | 0 | 70 | | | | | | | | | | | | | | | | | | | | |
| 2 | 20 | 62 | 300 | 0 | 0 | 0 | 0 | 50 | 0 | 70 | 140 | 0 | 50 | | | | | | | | | | | | | | | | | | | | |
| 3 | 6 | 62 | 700 | 0 | 0 | 40 | 0 | 0 | 0 | 210 | 500 | 20 | 60 | 93 | 1 | 82 | 1 | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 800 | 40 | 0 | 60 | 0 | 20 | 60 | 270 | 370 | 190 | 120 | | | | | | | | | | | | | | | | | | | | |
| 4 | 3 | 62 | 1200 | 20 | 60 | 0 | 0 | 0 | 40 | 250 | 850 | 20 | 120 | 92 | 2 | 82 | 1 | | | | | | | | | | | | | | | | |
| 4 | 17 | 62 | 1100 | 0 | 0 | 0 | 0 | 70 | 70 | 110 | 860 | 70 | 250 | 88 | 2 | | | | | | | | | | | | | | | | | | |
| 5 | 8 | 62 | 1500 | 0 | 0 | 40 | 0 | 40 | 0 | 330 | 1080 | 0 | 20 | 92 | 2 | 88 | 2 | 71 | 1 | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 2200 | 20 | 0 | 150 | 0 | 0 | 0 | 1100 | 990 | 300 | 170 | 68 | 2 | 71 | 2 | 92 | 2 | 93 | 1 | | | | | | | | | | | | |
| 6 | 19 | 62 | 2000 | 0 | 60 | 150 | 0 | 0 | 60 | 930 | 760 | 460 | 680 | 68 | 3 | 92 | 2 | 93 | 1 | | | | | | | | | | | | | | |
| 7 | 3 | 62 | 1000 | 40 | 0 | 170 | 20 | 40 | 0 | 230 | 480 | 80 | 210 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 17 | 62 | 200 | 40 | 0 | 40 | 0 | 0 | 0 | 40 | 40 | 110 | 20 | | | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 200 | 0 | 0 | 20 | 0 | 80 | 0 | 80 | 40 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 21 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 40 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 400 | 40 | 0 | 40 | 0 | 0 | 20 | 40 | 210 | 40 | 40 | | | | | | | | | | | | | | | | | | | | |
| 9 | 18 | 62 | 100 | 0 | 0 | 40 | 0 | 0 | 0 | 70 | 10 | 30 | 70 | | | | | | | | | | | | | | | | | | | | |

MICHIGAN

# PLANKTON POPULATION

**MAJOR BASIN** WESTERN GREAT LAKES

**MINOR BASIN** ST. CLAIR-DETROIT RIVERS

**STATION LOCATION** DETROIT RIVER AT

DETROIT, MICHIGAN 015

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 3 | 61 | 47 | 35 | 56 | 15 | 25 | 14 | 46 | 5 | 31 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 47 | 57 | 56 | 10 | 95 | 8 | 25 | 8 | 17 | 0 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 7 | 61 | 47 | 45 | 25 | 10 | 95 | 10 | 56 | 9 | 26 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 47 | 29 | 95 | 14 | 25 | 9 | 46 | 6 | 42 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 5 | 61 | 47 | 22 | 95 | 15 | 25 | 10 | 46 | 10 | 43 | 20 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 12 | 19 | 61 | 95 | 22 | 47 | 11 | 45 | 10 | 25 | 8 | 49 | 0 | 10 | 8 | | | | | | | | | | | 10 | 76 | 2 | 77 | 1 | | | 0 | 0 |
| 1 | 2 | 62 | 95 | 25 | 25 | 23 | 47 | 12 | 46 | 12 | 28 | 0 | 0 | 2 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 1 | 16 | 62 | 95 | 29 | 45 | 20 | 47 | 14 | 35 | 5 | 32 | 0 | 0 | 3 | | | | | | | | | | | 4 | | | | | | | 0 | 0 |
| 2 | 6 | 62 | 95 | 20 | 45 | 17 | 47 | 14 | 35 | 8 | 41 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 20 | 62 | 35 | 13 | 95 | 12 | 47 | 10 | 25 | 9 | 56 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 6 | 62 | 95 | 37 | 35 | 13 | 47 | 10 | 45 | 9 | 31 | 0 | 0 | 5 | 14 | 5 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 35 | 16 | 9 | 10 | 95 | 8 | 49 | 6 | 60 | 20 | 10 | 19 | 46 | 1 | 47 | 1 | | | | | | | 6 | 76 | 1 | | | | | 0 | 0 |
| 4 | 3 | 62 | 95 | 28 | 47 | 18 | 46 | 17 | 35 | 11 | 26 | 0 | 0 | 23 | 11 | 2 | 14 | 1 | | | | | | | 3 | | | | | | | 0 | 0 |
| 4 | 17 | 62 | 95 | 36 | 47 | 11 | 71 | 10 | 45 | 9 | 34 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 8 | 62 | 95 | 30 | 47 | 16 | 92 | 11 | 71 | 9 | 34 | 0 | 0 | 15 | 14 | 1 | | | | | | | | | 7 | 77 | 1 | | | | | 0 | 0 |
| 6 | 4 | 62 | 95 | 48 | 92 | 18 | 47 | 7 | 26 | 4 | 23 | 60 | 0 | 100 | 11 | 4 | 2 | 2 | 10 | 1 | | | | | 19 | 76 | 2 | 51 | 1 | 50 | 1 | 0 | 1 |
| 6 | 19 | 62 | 95 | 61 | 92 | 16 | 47 | 3 | 46 | 2 | 18 | 0 | 0 | 60 | 11 | 4 | 10 | 1 | 17 | 1 | | | | | 12 | 51 | 2 | | | | | 0 | 0 |
| 7 | 3 | 62 | 95 | 29 | 92 | 22 | 80 | 7 | 47 | 7 | 35 | 0 | 0 | 49 | 11 | 4 | | | | | | | | | 11 | 51 | 2 | | | | | 0 | 0 |
| 7 | 17 | 62 | 25 | 21 | 27 | 10 | 30 | 10 | 26 | 7 | 52 | 20 | 0 | 23 | 11 | 2 | 15 | 1 | | | | | | | 10 | 52 | 1 | 77 | 1 | | | 0 | 3 |
| 8 | 6 | 62 | | | | | | | | | | 0 | 0 | 120 | 11 | 4 | 17 | 3 | 22 | 2 | 15 | 2 | | | 12 | 50 | 2 | 76 | 1 | | | 0 | 0 |
| 8 | 21 | 62 | 25 | 36 | 46 | 21 | 48 | 11 | 95 | 3 | 29 | 0 | 0 | 50 | 11 | 3 | 5 | 2 | | | | | | | 5 | 76 | 1 | | | | | 0 | 0 |
| 9 | 4 | 62 | 24 | 24 | 47 | 10 | 73 | 7 | 30 | 6 | 53 | 0 | 0 | 90 | 11 | 4 | 5 | 3 | 16 | 2 | 17 | 1 | | | 4 | 50 | 1 | | | | | 0 | 0 |
| 9 | 18 | 62 | 25 | 39 | 24 | 17 | 49 | 8 | 56 | 3 | 33 | 0 | 0 | 81 | 11 | 3 | 22 | 3 | 5 | 2 | 17 | 1 | 15 | 1 | 3 | 51 | 1 | | | | | 0 | 1 |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 11 | 61 | 10 | 24 | 4560 | 100 | 21 | 79 | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 14 | 61 | 11 | 28 | 5020 | 138 | 27 | 111 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 11 | 61 | 12 | 26 | 5527 | 110 | 19 | 91 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 11 | 61 | | * | 15107 | 116 | 22 | 94 | 1 | 7 | 7 | 1 | 1 | 5 | 0 | 2 | 1 | 0 | 4 |
| 1 | 9 | 62 | 1 | 23 | 5320 | 124 | 27 | 97 | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 6 | 62 | 2 | 20 | 6100 | 112 | 33 | 79 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 6 | 62 | 3 | 19 | 4700 | 137 | 35 | 102 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 6 | 62 | | * | 16120 | 124 | 32 | 92 | 2 | 9 | 10 | 1 | 1 | 8 | 0 | 4 | 2 | 1 | 4 |
| 4 | 3 | 62 | 4 | 17 | 5680 | 110 | 26 | 84 | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 1 | 62 | 5 | 15 | 4495 | 111 | 39 | 72 | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 29 | 62 | 6 | 12 | 5100 | 109 | 31 | 78 | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 29 | 62 | | * | 15275 | 109 | 31 | 78 | 1 | 9 | 9 | 1 | 1 | 6 | 1 | 3 | 2 | 0 | 7 |
| 6 | 29 | 62 | 7 | 17 | 7215 | 77 | 29 | 48 | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 3 | 62 | 8 | 21 | 5977 | 91 | 28 | 63 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 10 | 62 | 9 | 25 | 6855 | 75 | 21 | 54 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 10 | 62 | | * | 20047 | 81 | 26 | 55 | 1 | 7 | 8 | 1 | 1 | 6 | 0 | 3 | 2 | 1 | 4 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 3 | 61 | 16.2 | 9.1 | 8.3 | .3 | 8 | – | – | .0 | 7 | 81 | 98 | 0 | 50 | 15 | .0 | 124 | 20 |
| 10 | 10 | 61 | 18.1 | 9.2 | 8.2 | .5 | 9 | .6 | 1.6 | .0 | 7 | 81 | 96 | 0 | 65 | 15 | .1 | 114 | 2400 |
| 10 | 17 | 61 | 16.4 | 9.6 | 8.2 | .4 | 9 | .8 | 1.2 | .0 | 9 | 81 | 98 | 0 | 60 | 15 | .0 | 125 | 7 |
| 10 | 24 | 61 | 13.3 | 9.6 | 8.3 | .2 | 10 | .7 | 1.1 | .0 | 8 | 80 | 97 | 0 | 55 | 15 | .0 | 127 | 7 |
| 10 | 31 | 61 | 11.7 | 10.3 | 8.2 | .6 | 12 | .7 | 1.1 | .0 | 6 | 81 | 98 | 0 | 70 | 14 | .3 | 113 | – |
| 11 | 7 | 61 | 13.0 | 10.5 | 8.2 | .1 | 8 | .4 | 1.3 | .0 | 7 | 80 | 97 | 0 | 70 | 15 | .0 | 120 | – |
| 11 | 14 | 61 | 11.2 | 11.0 | 8.1 | .7 | 11 | .4 | 1.0 | .0 | 6 | 78 | 95 | 0 | 65 | 15 | .0 | 118 | 8 |
| 11 | 21 | 61 | 10.3 | 11.6 | 8.1 | .5 | 10 | .4 | 1.1 | .0 | 7 | 76 | 95 | 0 | 80 | 15 | .0 | 119 | 10 |
| 11 | 28 | 61 | 10.3 | 12.1 | 8.1 | .4 | 13 | .8 | 2.0 | .0 | 7 | 81 | 99 | 0 | 60 | 15 | .1 | 122 | – |
| 12 | 5 | 61 | 8.9 | 12.1 | 8.2 | .1 | 12 | .3 | 1.0 | .0 | 7 | 78 | 94 | 0 | 25 | 15 | .0 | 115 | 12 |
| 12 | 12 | 61 | 8.0 | 13.1 | 8.0 | .1 | 12 | .5 | 1.1 | .0 | 8 | 79 | 98 | 0 | 23 | 16 | .0 | 118 | 67 |
| 12 | 19 | 61 | 5.0 | 14.3 | 8.0 | .5 | 12 | .4 | .9 | .0 | 7 | 79 | 96 | 0 | 14 | 15 | .0 | 115 | 3 |
| 12 | 26 | 61 | 5.0 | 13.5 | 8.1 | .7 | 9 | .2 | .5 | .0 | 6 | 78 | 93 | 0 | 20 | 14 | .0 | 113 | 3100 |
| 1 | 2 | 62 | 4.7 | 13.3 | 8.0 | .3 | 11 | .4 | 1.2 | .0 | 8 | 80 | 97 | 0 | 3 | 15 | .0 | 122 | *3 |
| 1 | 9 | 62 | 3.9 | 13.7 | 8.0 | .4 | 4 | .5 | .8 | .0 | 7 | 79 | 97 | 0 | 3 | 15 | .0 | 117 | – |
| 1 | 16 | 62 | 4.2 | 13.5 | 8.0 | .2 | 3 | .4 | .9 | .0 | 7 | 80 | 99 | 0 | 3 | 15 | .0 | 117 | *3 |
| 1 | 23 | 62 | 4.6 | 14.0 | 8.0 | .1 | 12 | .3 | .4 | .0 | 7 | 81 | 99 | 0 | 3 | 15 | .0 | 128 | *3 |
| 1 | 30 | 62 | 3.2 | 14.5 | 8.2 | .2 | 10 | .4 | .9 | .0 | 8 | 80 | 96 | 0 | 3 | 14 | .0 | 120 | *3 |
| 2 | 6 | 62 | 3.4 | 14.4 | 8.2 | .6 | 9 | .7 | 1.1 | .0 | 8 | 80 | 98 | 0 | 2 | 15 | .0 | 119 | *3 |
| 2 | 12 | 62 | 4.0 | 14.0 | 8.1 | .9 | 6 | .3 | .8 | .0 | 8 | 80 | 96 | 0 | 2 | 15 | .0 | 120 | 20 |
| 2 | 20 | 62 | 3.8 | 14.2 | 8.0 | .1 | 8 | .3 | .6 | .0 | 7 | 80 | 97 | 0 | 3 | 15 | .0 | 123 | 13 |
| 2 | 27 | 62 | 4.4 | 13.7 | 8.1 | .2 | 11 | .3 | .7 | .0 | 7 | 84 | 101 | 0 | 2 | 15 | .0 | 118 | *3 |
| 3 | 6 | 62 | 4.9 | 14.9 | 8.1 | 1.0 | 10 | .7 | 1.1 | .0 | 11 | 87 | 103 | 0 | 2 | 15 | .1 | 132 | 13 |
| 3 | 13 | 62 | 4.0 | 14.3 | 8.0 | .4 | 5 | .5 | .9 | .0 | 6 | 82 | 98 | 0 | 2 | 11 | .0 | 117 | *3 |
| 3 | 19 | 62 | 4.1 | 12.8 | 7.9 | .8 | 12 | .7 | 1.8 | .1 | 8 | 78 | 95 | 0 | 15 | 14 | .0 | 118 | 10 |
| 3 | 27 | 62 | 6.0 | 13.5 | 8.0 | .3 | 10 | .5 | .9 | .0 | 6 | 83 | 100 | 0 | 5 | 15 | .0 | 120 | 10 |
| 4 | 3 | 62 | 6.4 | 13.4 | 8.1 | .5 | 9 | .4 | .9 | .0 | 6 | 81 | 97 | 0 | 3 | 14 | .0 | 116 | *3 |
| 4 | 10 | 62 | 7.1 | 13.0 | 8.0 | .1 | 13 | .4 | .8 | .0 | 7 | 81 | 95 | 0 | 3 | 13 | .0 | 111 | *3 |
| 4 | 17 | 62 | 4.2 | 12.8 | 7.9 | .1 | 12 | .1 | .4 | .0 | 8 | 78 | 98 | 0 | 45 | 17 | .0 | 123 | *3 |
| 4 | 24 | 62 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | *3 |
| 5 | 1 | 62 | 13.3 | 11.4 | 8.4 | .2 | 17 | .6 | 1.4 | .0 | 6 | 83 | 98 | 0 | 30 | 14 | .0 | 128 | 7 |
| 5 | 8 | 62 | 12.6 | 11.2 | 8.2 | .4 | 10 | .5 | .8 | .0 | 6 | 82 | 99 | 0 | 37 | 14 | .0 | 121 | *3 |
| 5 | 15 | 62 | 14.4 | 11.2 | 8.2 | .5 | 13 | .3 | .8 | .0 | 6 | 82 | 98 | 0 | 15 | 14 | .0 | 120 | *3 |
| 5 | 22 | 62 | 17.0 | 10.3 | 8.4 | .6 | 12 | .4 | 1.3 | .0 | 6 | 84 | 97 | 0 | 13 | 15 | .0 | 130 | *3 |
| 5 | 29 | 62 | 18.6 | 10.1 | 8.2 | – | 12 | .2 | 2.7 | .0 | 7 | 86 | 100 | 0 | 27 | 16 | .0 | 133 | – |
| 6 | 5 | 62 | 18.3 | 9.7 | 8.5 | .7 | 9 | .5 | 1.4 | .0 | 7 | 84 | 99 | 0 | 20 | 14 | .0 | 120 | 33 |
| 6 | 12 | 62 | 18.2 | 9.2 | 8.3 | .3 | 9 | .5 | 1.1 | .0 | 6 | 82 | 95 | 0 | 20 | 13 | .1 | 117 | 27 |
| 6 | 19 | 62 | 19.6 | 9.0 | 8.3 | .4 | 10 | .6 | 1.6 | .0 | 6 | 83 | 97 | 0 | 25 | 14 | .0 | 126 | 73 |
| 6 | 26 | 62 | 21.7 | 8.7 | 8.4 | .1 | 13 | .4 | 1.7 | .0 | 6 | 83 | 98 | 0 | 27 | 14 | .0 | 120 | *3 |

**STATION LOCATION** DETROIT RIVER AT

DETROIT, MICHIGAN 15

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 3 | 62 | 20.6 | 8.5 | 8.3 | – | 9 | .3 | 1.3 | .0 | 6 | 82 | 98 | 0 | 35 | 14 | .0 | 125 | 770 |
| 7 | 10 | 62 | 22.6 | 8.2 | 8.3 | .4 | 8 | .8 | 1.3 | .0 | 6 | 82 | 95 | 0 | 30 | 14 | .0 | 123 | 10 |
| 7 | 17 | 62 | 23.0 | 8.5 | 8.3 | .3 | 9 | .6 | 1.7 | .0 | 6 | 83 | 96 | 0 | 30 | 14 | .0 | 128 | 20 |
| 7 | 25 | 62 | 22.4 | 8.1 | 8.3 | .3 | 8 | .4 | 1.0 | .0 | 5 | 82 | 98 | 0 | 30 | 15 | .0 | 127 | 20 |
| 7 | 31 | 62 | 24.0 | 7.1 | 8.4 | – | 7 | .4 | 1.7 | .0 | 6 | 84 | 97 | 0 | 20 | 16 | .0 | 125 | 20 |
| 8 | 7 | 62 | 22.3 | 8.2 | 8.4 | .3 | 8 | .4 | 1.2 | .0 | 7 | 82 | 99 | 0 | 20 | 15 | .0 | 129 | 25 |
| 8 | 14 | 62 | 22.6 | 8.3 | 8.3 | .1 | 10 | .5 | 1.6 | .0 | 7 | 83 | 96 | 0 | 20 | 15 | .0 | 115 | 10 |
| 8 | 21 | 62 | 22.0 | 8.4 | 8.4 | .2 | 8 | .4 | 1.2 | .0 | 6 | 82 | 96 | 0 | 15 | 15 | .1 | 136 | 10 |
| 8 | 28 | 62 | 23.3 | 8.0 | 8.3 | .4 | 7 | .4 | 1.3 | .0 | 8 | 82 | 97 | 0 | 20 | 15 | .0 | 131 | 25 |
| 9 | 4 | 62 | 23.2 | 7.8 | 8.3 | .2 | 9 | .5 | 1.4 | .0 | 7 | 82 | 97 | 0 | 15 | 15 | .0 | 122 | 10 |
| 9 | 11 | 62 | 21.3 | 8.6 | 8.3 | .2 | 9 | .4 | 1.4 | .0 | 7 | 82 | 96 | 0 | 15 | 14 | .0 | 128 | 670 |
| 9 | 18 | 62 | 20.5 | 8.8 | 8.3 | .4 | 10 | .3 | 1.3 | .0 | 6 | 83 | 97 | 0 | 20 | 15 | .0 | 131 | 10 |
| 9 | 25 | 62 | 17.5 | 9.4 | 8.2 | .4 | 8 | .3 | .9 | .0 | 6 | 82 | 98 | 0 | 18 | 15 | .0 | 121 | 30 |

| | |
|---|---|
| STATE | Michigan |
| MAJOR BASIN | Western Great Lakes |
| MINOR BASIN | St. Clair-Detroit Rivers |
| STATION LOCATION | Detroit River at<br>Detroit, Michigan |

MEAN MONTHLY FLOW - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Supplied by U.S. Army Corps of Engineers
U.S. Lake Survey

| October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 187.000 | 185.000 | 183.000 | 156.000 | 143.000 | 182.000 | 190.000 | 190.000 | 194.000 | 192.000 | 190.000 | 189.000 |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** WESTERN GREAT LAKES

**MINOR BASIN** ST. CLAIR-DETROIT RIVERS

**STATION LOCATION** ST. CLAIR RIVER AT
PORT HURON, MICHIGAN 64

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 16 | – | – | – | – | – | – | 0 | 5 | 0 | 6 | 0 | 8 | | | | | | |
| 10 | 9 | 61 | 10 | 27 | – | – | – | – | – | – | 1 | 5 | 3 | 6 | 4 | 8 | | | | | | |
| 10 | 16 | 61 | 10 | 27 | – | – | – | – | – | – | 13 | 5 | 5 | 6 | 18 | 8 | | | | | | |
| 10 | 23 | 61 | 11 | 2 | 0 | 0 | 2 | 1 | 2 | 1 | 4 | 4 | 11 | 5 | 15 | 6 | | | | | | |
| 10 | 30 | 61 | 11 | 14 | – | – | – | – | – | – | 1 | 5 | 12 | 6 | 13 | 8 | | | | | | |
| 11 | 6 | 61 | 11 | 22 | – | – | – | – | – | – | 0 | 4 | 7 | 4 | 7 | 6 | | | | | | |
| 11 | 13 | 61 | 11 | 28 | – | – | – | – | – | – | 0 | 5 | 2 | 6 | 2 | 8 | | | | | | |
| 11 | 20 | 61 | 12 | 4 | – | – | – | – | – | – | 1 | 6 | 6 | 6 | 7 | 8 | | | | | | |
| 11 | 27 | 61 | 12 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 5 | 5 | 5 | 11 | 7 | | | | | | |
| 12 | 11 | 61 | 12 | 19 | – | – | – | – | – | – | 1 | 5 | 3 | 6 | 4 | 8 | | | | | | |
| 12 | 18 | 61 | 12 | 26 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 4 | 6 | 4 | 6 | 6 | | | | | | |
| 1 | 3 | 62 | 1 | 15 | – | – | – | – | – | – | 3 | 4 | 3 | 5 | 6 | 6 | | | | | | |
| 1 | 8 | 62 | 1 | 19 | – | – | – | – | – | – | 26 | 6 | 11 | 6 | 37 | 8 | | | | | | |
| 1 | 15 | 62 | 1 | 26 | – | – | – | – | – | – | 6 | 4 | 15 | 5 | 21 | 6 | | | | | | |
| 1 | 22 | 62 | 1 | 30 | – | – | – | – | – | – | 5 | 5 | 10 | 6 | 15 | 8 | | | | | | |
| 1 | 29 | 62 | 2 | 6 | – | – | – | – | – | – | 2 | 5 | 7 | 6 | 9 | 7 | | | | | | |
| 2 | 5 | 62 | 2 | 14 | – | – | – | – | – | – | 2 | 5 | 7 | 6 | 9 | 8 | | | | | | |
| 2 | 19 | 62 | 3 | 2 | – | – | – | – | – | – | 4 | 5 | 12 | 6 | 16 | 8 | | | | | | |
| 2 | 26 | 62 | 3 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 4 | 11 | 5 | 17 | 6 | | | | | | |
| 3 | 5 | 62 | 3 | 16 | – | – | – | – | – | – | 3 | 4 | 5 | 5 | 8 | 6 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | – | – | – | – | – | – | 3 | 5 | 14 | 6 | 17 | 7 | | | | | | |
| 3 | 19 | 62 | 4 | 3 | – | – | – | – | – | – | 3 | 5 | 9 | 6 | 12 | 7 | | | | | | |
| 3 | 26 | 62 | 4 | 9 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 4 | 12 | 5 | 15 | 6 | | | | | | |
| 4 | 2 | 62 | 4 | 19 | – | – | – | – | – | – | 5 | 5 | 9 | 6 | 14 | 7 | | | | | | |
| 4 | 9 | 62 | 4 | 24 | – | – | – | – | – | – | 0 | 6 | 0 | 6 | 0 | 8 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | – | – | – | – | – | – | 15 | 7 | 11 | 7 | 26 | 10 | | | | | | |
| 4 | 23 | 62 | 5 | 29 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 7 | 5 | 8 | 5 | 11 | | | | | | |
| 4 | 30 | 62 | 6 | 1 | – | – | – | – | – | – | 7 | 7 | 15 | 8 | 22 | 11 | | | | | | |
| 5 | 7 | 62 | 6 | 18 | – | – | – | – | – | – | 4 | 6 | 12 | 8 | 16 | 10 | | | | | | |
| 5 | 14 | 62 | 5 | 14 | – | – | – | – | – | – | 6 | 5 | 10 | 7 | 16 | 9 | | | | | | |
| 5 | 22 | 62 | 6 | 26 | – | – | – | – | – | – | 7 | 5 | 6 | 7 | 13 | 9 | | | | | | |
| 5 | 28 | 62 | 6 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 7 | 6 | 8 | 8 | | | | | | |
| 6 | 4 | 62 | 7 | 6 | – | – | – | – | – | – | 1 | 5 | 10 | 6 | 11 | 8 | | | | | | |
| 6 | 11 | 62 | 7 | 11 | – | – | – | – | – | – | 5 | 5 | 16 | 7 | 21 | 9 | | | | | | |
| 6 | 18 | 62 | 7 | 17 | – | – | – | – | – | – | 3 | 5 | 10 | 7 | 13 | 9 | | | | | | |
| 6 | 25 | 62 | 8 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 6 | 6 | 11 | 8 | 17 | 10 | | | | | | |
| 7 | 2 | 62 | 8 | 6 | – | – | – | – | – | – | 4 | 3 | 9 | 3 | 13 | 4 | | | | | | |
| 7 | 9 | 62 | 8 | 6 | – | – | – | – | – | – | 1 | 3 | 7 | 4 | 8 | 5 | | | | | | |
| 7 | 16 | 62 | 8 | 8 | – | – | – | – | – | – | 1 | 5 | 8 | 7 | 9 | 9 | | | | | | |
| 7 | 23 | 62 | 9 | 29 | 0 | 0 | 0 | 1 | 0 | 1 | 68 | 7 | 9 | 7 | 77 | 10 | | | | | | |
| 7 | 30 | 62 | 8 | 22 | – | – | – | – | – | – | 0 | 7 | 13 | 7 | 13 | 10 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 6 | 62 | 8 | 28 | - | - | - | - | - | - | 3 | 5 | 14 | 6 | 17 | 7 | | | | | | |
| 8 | 14 | 62 | 8 | 30 | - | - | - | - | - | - | 13 | 6 | 10 | 6 | 23 | 8 | | | | | | |
| 8 | 20 | 62 | 9 | 11 | - | - | - | - | - | - | 4 | 6 | 8 | 7 | 12 | 9 | | | | | | |
| 8 | 27 | 62 | 11 | 1 | - | - | - | - | - | - | 6 | 5 | 10 | 7 | 16 | 9 | | | | | | |
| 9 | 4 | 62 | 9 | 28 | - | - | - | - | - | - | 1 | 5 | 5 | 7 | 6 | 9 | | | | | | |
| 9 | 10 | 62 | 10 | 2 | - | - | - | - | - | - | 5 | 6 | 5 | 8 | 10 | 10 | | | | | | |
| 9 | 17 | 62 | 10 | 16 | - | - | - | - | - | - | 6 | 5 | 6 | 6 | 12 | 7 | | | | | | |
| 9 | 24 | 62 | 10 | 16 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 5 | 8 | 7 | 13 | 8 | | | | | | |

NATIONAL WATER QUALITY NETWORK

# PLANKTON POPULATION

STATE MICHIGAN

MAJOR BASIN WESTERN GREAT LAKES

MINOR BASIN ST. CLAIR DETROIT RIVERS

STATION LOCATION ST. CLAIR RIVER AT

PORT HURON, MICHIGAN 64

| DATE OF SAMPLE | | | ALGAE (Number per milliliter) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 400 | 20 | 0 | 210 | 0 | 0 | 0 | 120 | 20 | 40 | 0 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 900 | 40 | 0 | 60 | 0 | 0 | 60 | 270 | 480 | 80 | 190 | 84 | 1 | 68 | 1 | | | | | | | | | | | | | | | | |
| 10 | 30 | 61 | 600 | 40 | 0 | 170 | 20 | 0 | 60 | 120 | 150 | 60 | 20 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 1200 | 230 | 20 | 230 | 0 | 0 | 0 | 290 | 410 | 340 | 540 | 2 | 1 | 84 | 1 | 68 | 1 | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 200 | 0 | 0 | 40 | 0 | 0 | 0 | 80 | 40 | 40 | 80 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 900 | 0 | 0 | 40 | 0 | 740 | 0 | 50 | 50 | 70 | 90 | 57 | 3 | | | | | | | | | | | | | | | | | | |
| 1 | 3 | 62 | 400 | 0 | 0 | 70 | 0 | 0 | 20 | 50 | 250 | 50 | 160 | | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 200 | 0 | 0 | 20 | 0 | 20 | 0 | 60 | 100 | 40 | 20 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 500 | 0 | 0 | 20 | 0 | 0 | 0 | 140 | 340 | 0 | 50 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 400 | 0 | 0 | 0 | 0 | 20 | 20 | 20 | 340 | 0 | 90 | 82 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 700 | 20 | 0 | 0 | 0 | 510 | 0 | 70 | 130 | 90 | 180 | 57 | 2 | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 160 | 0 | 90 | | | | | | | | | | | | | | | | | | | | |
| 4 | 9 | 62 | 800 | 0 | 0 | 60 | 0 | 40 | 170 | 230 | 310 | 20 | 60 | 62 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 3500 | 0 | 0 | 540 | 20 | 20 | 110 | 830 | 1920 | 290 | 900 | 84 | 3 | 69 | 2 | 25 | 2 | 71 | 1 | 77 | 1 | 97 | 1 | 88 | 1 | 68 | 1 | 92 | 1 | | |
| 5 | 7 | 62 | 2600 | 0 | 40 | 60 | 40 | 0 | 360 | 570 | 1480 | 400 | 550 | 92 | 3 | 63 | 1 | 68 | 1 | 71 | 1 | 88 | 1 | | | | | | | | | | |
| 5 | 14 | 62 | 1200 | 0 | 20 | 0 | 0 | 0 | 630 | 0 | 550 | 40 | 550 | 62 | 3 | 92 | 1 | 93 | 1 | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 1500 | 0 | 230 | 60 | 0 | 0 | 130 | 300 | 800 | 80 | 420 | 92 | 2 | | | | | | | | | | | | | | | | | | |
| 6 | 11 | 62 | 900 | 0 | 0 | 60 | 0 | 360 | 60 | 80 | 300 | 0 | 40 | 57 | 2 | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 20 | 130 | 210 | 130 | 80 | | | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 200 | 0 | 0 | 20 | 0 | 20 | 0 | 110 | 90 | 70 | 200 | | | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 300 | 0 | 0 | 110 | 0 | 0 | 130 | 80 | 0 | 80 | 130 | | | | | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 20 | 130 | 80 | 80 | 80 | | | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 400 | 0 | 0 | 40 | 0 | 0 | 170 | 130 | 80 | 130 | 80 | 62 | 1 | | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 200 | 10 | 0 | 40 | 0 | 0 | 0 | 110 | 80 | 40 | 110 | | | | | | | | | | | | | | | | | | | | |

**MINOR BASIN** ST. CLAIR-DETROIT RIVERS

**STATION LOCATION** ST. CLAIR RIVER AT

PORT HURON, MICHIGAN 064

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 47 | 64 | 25 | 9 | 46 | 6 | 95 | 4 | 17 | 0 | 0 | 46 | 17 | 2 | 11 | 2 | 22 | 1 | 21 | 1 | | | 10 | 51 | 2 | | | | | 0 | 0 |
| 10 | 16 | 61 | 47 | 45 | 46 | 30 | 48 | 11 | 6 | 2 | 12 | 0 | 0 | 10 | 11 | 1 | 17 | 1 | | | | | | | 17 | 51 | 3 | | | | | 0 | 0 |
| 10 | 30 | 61 | 47 | 69 | 25 | 11 | 56 | 9 | 95 | 9 | 2 | 0 | 0 | 8 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 46 | 23 | 47 | 22 | 48 | 14 | 25 | 9 | 32 | 110 | 0 | 10 | 11 | 1 | | | | | | | | | 7 | 51 | 1 | | | | | 0 | 0 |
| 12 | 4 | 61 | 47 | 31 | 25 | 24 | 95 | 14 | 56 | 8 | 23 | 0 | 0 | 0 | | | | | | | | | | | 9 | 77 | 1 | 76 | 1 | | | 0 | 0 |
| 12 | 18 | 61 | 46 | 22 | 25 | 18 | 95 | 11 | 9 | 7 | 42 | 0 | 0 | 10 | 11 | 1 | | | | | | | | | 15 | 76 | 3 | 77 | 1 | | | 0 | 0 |
| 1 | 3 | 62 | 25 | 16 | 45 | 13 | 95 | 9 | 47 | 8 | 54 | 20 | 0 | 4 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 45 | 47 | 95 | 24 | 35 | 6 | 47 | 6 | 17 | 0 | 10 | 15 | 11 | 1 | | | | | | | | | 11 | 76 | 1 | 77 | 1 | | | 0 | 0 |
| 2 | 5 | 62 | 95 | 20 | 25 | 10 | 45 | 9 | 35 | 8 | 53 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 35 | 31 | 45 | 14 | 95 | 12 | 77 | 8 | 35 | 0 | 0 | 3 | | | | | | | | | | | 6 | 76 | 1 | | | | | 0 | 0 |
| 3 | 5 | 62 | 95 | 41 | 46 | 12 | 35 | 9 | 9 | 8 | 30 | 0 | 0 | 8 | 14 | 1 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 95 | 33 | 47 | 18 | 46 | 11 | 35 | 9 | 29 | 0 | 0 | 5 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 4 | 9 | 62 | 95 | 40 | 47 | 14 | 89 | 13 | 25 | 6 | 27 | 0 | 0 | 16 | 14 | 2 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 95 | 20 | 48 | 17 | 46 | 10 | 47 | 7 | 46 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 95 | 31 | 47 | 13 | 46 | 11 | 92 | 8 | 37 | 0 | 0 | 17 | 14 | 1 | | | | | | | | | 6 | 51 | 1 | | | | | 0 | 1 |
| 5 | 14 | 62 | 95 | 38 | 92 | 15 | 47 | 13 | 45 | 7 | 27 | 0 | 0 | 12 | 14 | 1 | | | | | | | | | 16 | 50 | 2 | 76 | 1 | | | 0 | 0 |
| 6 | 4 | 62 | 95 | 39 | 92 | 20 | 47 | 9 | 45 | 4 | 28 | 0 | 0 | 10 | 11 | 1 | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 6 | 11 | 62 | 95 | 58 | 92 | 9 | 25 | 7 | 91 | 6 | 20 | 0 | 0 | 42 | 11 | 3 | 17 | 1 | | | | | | | 2 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 95 | 39 | 47 | 17 | 92 | 14 | 25 | 9 | 21 | 130 | 0 | 151 | 11 | 5 | 7 | 2 | 17 | 2 | | | | | 47 | 51 | 4 | 76 | 2 | | | 0 | 0 |
| 7 | 16 | 62 | 30 | 25 | 25 | 23 | 47 | 15 | 24 | 8 | 29 | 0 | 0 | 121 | 11 | 4 | 10 | 3 | 2 | 1 | 15 | 1 | 1 | 1 | 21 | 51 | 3 | 50 | 2 | 76 | 1 | 1 | 1 |
| 8 | 6 | 62 | 47 | 31 | 30 | 21 | 25 | 16 | 24 | 11 | 21 | 0 | 0 | 18 | 11 | 1 | | | | | | | | | 9 | 50 | 1 | | | | | 0 | 3 |
| 8 | 20 | 62 | 25 | 30 | 24 | 12 | 46 | 12 | 30 | 10 | 36 | 0 | 0 | 34 | 11 | 2 | 5 | 1 | 17 | 1 | | | | | 7 | 76 | 2 | | | | | 0 | 0 |
| 9 | 4 | 62 | 24 | 27 | 30 | 19 | 47 | 14 | 25 | 12 | 28 | 0 | 0 | 36 | 11 | 2 | 17 | 2 | 5 | 1 | | | | | 9 | 50 | 1 | 76 | 1 | 77 | 1 | 0 | 0 |
| 9 | 17 | 62 | 25 | 66 | 24 | 12 | 47 | 6 | 49 | 3 | 13 | 0 | 0 | 96 | 11 | 3 | 17 | 3 | 5 | 3 | 22 | 1 | | | 15 | 51 | 3 | 76 | 1 | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

## ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** MICHIGAN

**MAJOR BASIN** WESTERN GREAT LAKES

**MINOR BASIN** ST. CLAIR-DETROIT RIVERS

**STATION LOCATION** ST. CLAIR RIVER AT
PORT HURON, MICHIGAN

6

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 23 | 61 | 11 | 22 | 5510 | 185 | 38 | 147 | 3 | 10 | 10 | 1 | 1 | 7 | 1 | 3 | 2 | 1 | 9 |
| 11 | 22 | 61 | 12 | 18 | 5590 | 150 | 44 | 106 | 2 | 18 | 9 | 1 | 1 | 7 | 0 | 3 | 3 | 0 | 9 |
| 12 | 18 | 61 | 1 | 8 | 5660 | 109 | 31 | 78 | 2 | 11 | 7 | 1 | 1 | 5 | 0 | 3 | 2 | 1 | 5 |
| 1 | 30 | 62 | 2 | 20 | 5380 | 130 | 28 | 102 | 1 | 11 | 8 | 0 | 0 | 8 | 0 | 3 | 1 | 1 | 3 |
| 3 | 13 | 62 | 4 | 3 | 5240 | 156 | 38 | 118 | 3 | 14 | 8 | 1 | 0 | 6 | 1 | 4 | 3 | 1 | 5 |
| 4 | 19 | 62 | 5 | 15 | 5730 | 177 | 71 | 106 | 4 | 26 | 14 | 1 | 1 | 12 | 0 | 7 | 6 | 1 | 13 |
| 6 | 10 | 62 | 7 | 4 | 5130 | 160 | 61 | 99 | 3 | 22 | 12 | 1 | 1 | 8 | 2 | 5 | 5 | 1 | 13 |
| 7 | 31 | 62 | 8 | 20 | 5350 | 138 | 29 | 109 | 1 | 8 | 9 | 1 | 0 | 7 | 1 | 2 | 2 | 1 | 6 |
| 9 | 10 | 62 | 10 | 1 | 6210 | 141 | 40 | 101 | 2 | 14 | 7 | 1 | 0 | 6 | 0 | 3 | 3 | 1 | 10 |

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** WESTERN GREAT LAKES

**MINOR BASIN** ST. CLAIR-DETROIT RIVERS

**STATION LOCATION** ST. CLAIR RIVER AT

PORT HURON, MICHIGAN 64

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 17.0 | 9.5 | 8.0 | .2 | 22 | - | - | .1 | 6 | 82 | 102 | 0 | 0 | 14 | - | 108 | 60 |
| 10 | 9 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *2 |
| 10 | 16 | 61 | 15.0 | 9.6 | 8.0 | .2 | 20 | - | - | .5 | 9 | 84 | 100 | 0 | 0 | 11 | - | 96 | 12 |
| 10 | 23 | 61 | 13.0 | 9.9 | 7.9 | 1.1 | 17 | - | - | .1 | 6 | 82 | 104 | 0 | 0 | 12 | - | 100 | - |
| 10 | 30 | 61 | 14.0 | 9.5 | 7.9 | .1 | 6 | - | - | .1 | 7 | 82 | 96 | 0 | 0 | 12 | - | 136 | - |
| 11 | 13 | 61 | 11.0 | 10.2 | 7.9 | 2.0 | 0 | - | - | .1 | 6 | 80 | 90 | 0 | 0 | 12 | .1 | 120 | 6 |
| 11 | 20 | 61 | 9.0 | 10.8 | 7.9 | 2.1 | 5 | - | - | .1 | 6 | 82 | 96 | 0 | 0 | 11 | .0 | 104 | - |
| 11 | 27 | 61 | 8.5 | 11.1 | 7.7 | 2.3 | 18 | - | - | .1 | 7 | 84 | 100 | 0 | 0 | 11 | .1 | 104 | - |
| 12 | 4 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 19 | .0 | - | - |
| 12 | 8 | 61 | 9.0 | 10.9 | 7.9 | .9 | - | - | - | .1 | 6 | 88 | 96 | 0 | 0 | 13 | - | 100 | - |
| 12 | 11 | 61 | 6.0 | 11.1 | 7.9 | 2.5 | - | - | - | .1 | 6 | 88 | 96 | 0 | 0 | 9 | - | 100 | - |
| 12 | 18 | 61 | 4.5 | 12.3 | 7.9 | 4.3 | - | - | - | .1 | 7 | 82 | 96 | 0 | 0 | 17 | .1 | 108 | - |
| 1 | 3 | 62 | 2.0 | 13.5 | 7.7 | 5.0 | 14 | - | - | .1 | 6 | 84 | 98 | 0 | 0 | 18 | .0 | 112 | - |
| 1 | 8 | 62 | 1.0 | 13.6 | 7.7 | 3.7 | 8 | - | - | .1 | 6 | 84 | 98 | 0 | 0 | 9 | .0 | 112 | *2 |
| 1 | 15 | 62 | 1.5 | 13.8 | 8.0 | 3.3 | 10 | - | - | .1 | 8 | 84 | 98 | 0 | 0 | 10 | .0 | 120 | *2 |
| 1 | 22 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 16 | .0 | - | 2 |
| 1 | 29 | 62 | 1.0 | 14.0 | 7.9 | 2.5 | 6 | - | - | .1 | 7 | 84 | 94 | 0 | 0 | 10 | .0 | 101 | *2 |
| 2 | 5 | 62 | 1.0 | 13.9 | 8.0 | 4.0 | 10 | - | - | .1 | 7 | 82 | 90 | 0 | 1 | 10 | .0 | 115 | - |
| 2 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 |
| 2 | 19 | 62 | 1.0 | 14.4 | 8.0 | - | - | - | - | .1 | 8 | 82 | 100 | 0 | 2 | 12 | - | 100 | *2 |
| 2 | 26 | 62 | 1.0 | 14.4 | 8.3 | 5.3 | - | - | - | - | - | 88 | 102 | 0 | 1 | 10 | - | 108 | *2 |
| 3 | 5 | 62 | 1.5 | 14.0 | 8.0 | - | - | - | - | .1 | - | 86 | 102 | 0 | 2 | 10 | - | 112 | *2 |
| 3 | 19 | 62 | 2.0 | 14.5 | 8.2 | - | - | - | - | .1 | - | 82 | 104 | 0 | 2 | 11 | - | 124 | 20 |
| 3 | 27 | 62 | 2.5 | 13.8 | 8.1 | 1.4 | - | - | - | .1 | 5 | 72 | 96 | 0 | 2 | 9 | - | 102 | *2 |
| 4 | 2 | 62 | 3.0 | 12.5 | 8.2 | 1.3 | - | - | - | .1 | 5 | 72 | 96 | 0 | 1 | 10 | .0 | 110 | - |
| 4 | 7 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 4 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *2 |
| 4 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | *100 |
| 4 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 2 |
| 4 | 30 | 62 | 7.0 | 12.1 | 8.2 | - | - | - | - | .1 | 7 | 84 | 94 | 5 | 4 | 9 | .0 | - | 2 |
| 5 | 7 | 62 | 10.0 | 11.5 | 8.2 | 1.0 | - | - | - | .1 | 5 | 84 | 94 | 6 | 8 | 10 | - | 112 | 12 |
| 5 | 15 | 62 | 11.0 | 11.7 | 8.2 | 1.0 | - | - | - | .1 | 6 | 88 | 98 | 5 | 4 | 12 | - | 120 | - |
| 5 | 22 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 3 |
| 5 | 28 | 62 | 11.0 | 11.5 | 8.3 | 1.0 | - | - | - | .1 | 7 | 84 | 94 | 3 | 2 | 10 | - | 120 | *2 |
| 6 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 25 |
| 6 | 6 | 62 | 15.0 | 11.4 | 8.2 | .6 | - | - | - | .1 | 8 | 84 | 94 | 5 | 3 | 9 | - | - | - |
| 6 | 11 | 62 | 15.0 | 11.4 | 8.2 | .4 | - | - | - | .1 | 6 | 84 | 96 | 5 | 3 | 9 | .0 | 126 | 12 |
| 6 | 18 | 62 | 16.0 | 10.3 | 8.3 | .4 | - | - | - | .1 | 6 | 88 | 94 | 0 | 1 | 9 | - | 152 | 90 |
| 6 | 25 | 62 | 17.0 | 10.0 | 8.3 | .5 | - | - | - | .1 | 5 | 92 | 96 | 4 | 7 | 12 | - | - | 6 |

NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE MICHIGAN
MAJOR BASIN WESTERN GREAT LAKES
MINOR BASIN ST. CLAIR-DETROIT RIVERS
STATION LOCATION ST. CLAIR RIVER AT
PORT HURON, MICHIGAN 64

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 2 | 62 | 20.0 | 9.5 | 8.3 | .4 | - | - | - | .1 | 6 | 82 | 98 | 4 | 1 | 11 | - | - | 8 |
| 7 | 9 | 62 | 19.0 | 9.9 | 8.3 | .4 | - | - | - | .1 | 12 | 88 | 98 | 5 | 6 | 10 | .0 | - | 6 |
| 7 | 16 | 62 | 20.0 | 8.5 | 8.3 | - | - | - | - | .1 | 6 | 88 | 98 | 5 | 8 | 9 | .0 | 100 | 40 |
| 7 | 23 | 62 | 21.0 | 8.9 | 8.3 | .3 | - | - | - | .1 | 10 | 90 | 96 | 7 | 15 | 11 | - | 124 | 22 |
| 7 | 30 | 62 | 20.0 | 9.3 | 8.2 | .5 | - | - | - | .1 | 11 | 88 | 96 | 2 | 4 | 10 | - | 100 | 14 |
| 8 | 6 | 62 | 20.0 | 9.0 | 8.2 | .3 | - | - | - | .1 | 12 | 88 | 100 | 6 | 4 | 11 | .0 | 104 | 10 |
| 8 | 14 | 62 | 20.0 | 8.7 | 8.3 | .2 | - | - | - | .1 | 11 | 90 | 96 | 12 | 21 | 10 | - | - | 20 |
| 8 | 20 | 62 | 20.0 | 9.0 | 8.2 | .4 | - | - | - | .1 | 7 | 90 | 96 | 5 | 6 | 10 | - | - | 6 |
| 8 | 27 | 62 | 20.5 | 8.7 | 8.2 | .8 | - | .1 | - | - | 7 | 88 | 96 | 2 | 4 | 11 | - | - | 10 |
| 9 | 4 | 62 | 21.0 | 8.7 | 8.2 | .2 | - | - | - | .1 | 7 | 90 | 96 | 5 | 4 | 9 | - | 104 | 2 |
| 9 | 10 | 62 | 19.5 | 9.1 | 8.3 | .4 | - | - | - | .1 | 6 | 90 | 98 | 5 | 4 | 8 | - | 118 | 8 |
| 9 | 17 | 62 | 19.5 | 9.2 | 8.3 | .5 | - | - | - | .1 | 6 | 90 | 98 | 5 | 2 | 8 | .0 | 100 | 10 |
| 9 | 24 | 62 | 17.0 | 9.7 | 8.3 | .9 | - | - | - | .1 | 7 | 90 | 100 | 5 | 2 | 10 | - | 102 | 8 |

| | |
|---|---|
| MEAN MONTHLY FLOW - 1961-1962 | |
| Thousand Cubic Feet per Second | |
| PROVISIONAL--SUBJECT TO REVISION | |
| Supplied by U.S. Army Corps of Engineers<br>U.S. Lake Survey | |
| STATE | Michigan |
| MAJOR BASIN | Western Great Lakes |
| MINOR BASIN | St. Clair-Detroit Rivers |
| STATION LOCATION | St. Clair River at<br>Port Huron, Michigan |

| October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 184.000 | 181.000 | 178.000 | 143.000 | 143.000 | 178.000 | 186.000 | 189.000 | 193.000 | 192.000 | 189.000 | 187.000 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** INDIANA
**MAJOR BASIN** WESTERN GREAT LAKES
**MINOR BASIN** ST. JOSEPH RIVER
**STATION LOCATION** LAKE MICHIGAN AT
GARY, INDIANA

17

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 3 | 61 | 10 | 13 | - | - | - | - | - | - | 0 | 5 | 15 | 7 | 15 | 9 | | | | | | |
| 10 | 10 | 61 | 11 | 1 | 0 | 1 | 2 | 1 | 2 | 1 | 2 | 4 | 8 | 5 | 10 | 6 | | | | | | |
| 10 | 17 | 61 | 10 | 31 | - | - | - | - | - | - | 1 | 5 | 4 | 7 | 5 | 9 | | | | | | |
| 10 | 24 | 61 | 11 | 3 | - | - | - | - | - | - | 0 | 6 | 6 | 7 | 6 | 9 | | | | | | |
| 10 | 31 | 61 | 11 | 20 | - | - | - | - | - | - | 3 | 4 | 2 | 5 | 5 | 6 | | | | | | |
| 11 | 21 | 61 | 11 | 28 | - | - | - | - | - | - | 11 | 5 | 8 | 7 | 19 | 9 | | | | | | |
| 11 | 28 | 61 | 12 | 5 | 1 | 1 | 0 | 1 | 1 | 1 | 18 | 6 | 12 | 7 | 30 | 9 | | | | | | |
| 12 | 5 | 61 | 12 | 12 | - | - | - | - | - | - | 19 | 6 | 14 | 7 | 33 | 9 | | | | | | |
| 12 | 12 | 61 | 12 | 18 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 4 | 13 | 6 | 18 | 7 | | | | | | |
| 12 | 19 | 61 | 12 | 28 | - | - | - | - | - | - | 4 | 5 | 10 | 7 | 14 | 9 | | | | | | |
| 1 | 9 | 62 | 1 | 17 | 0 | 1 | 0 | 1 | 0 | 1 | 25 | 5 | 12 | 5 | 37 | 7 | | | | | | |
| 1 | 16 | 62 | 1 | 24 | - | - | - | - | - | - | 16 | 4 | 16 | 5 | 32 | 6 | | | | | | |
| 1 | 23 | 62 | 1 | 30 | - | - | - | - | - | - | 2 | 5 | 15 | 7 | 17 | 9 | | | | | | |
| 1 | 30 | 62 | 2 | 7 | - | - | - | - | - | - | 7 | 6 | 14 | 7 | 21 | 9 | | | | | | |
| 2 | 6 | 62 | 2 | 14 | - | - | - | - | - | - | 19 | 6 | 10 | 7 | 29 | 8 | | | | | | |
| 2 | 13 | 62 | 2 | 23 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 4 | 8 | 5 | 14 | 6 | | | | | | |
| 2 | 20 | 62 | 3 | 2 | - | - | - | - | - | - | 0 | 5 | 0 | 6 | 0 | 8 | | | | | | |
| 2 | 27 | 62 | 3 | 7 | - | - | - | - | - | - | 6 | 4 | 9 | 5 | 15 | 6 | | | | | | |
| 3 | 6 | 62 | 3 | 16 | - | - | - | - | - | - | 4 | 4 | 11 | 5 | 15 | 6 | | | | | | |
| 3 | 13 | 62 | 3 | 20 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 6 | 15 | 7 | 21 | 9 | | | | | | |
| 3 | 20 | 62 | 3 | 30 | - | - | - | - | - | - | 32 | 4 | 10 | 7 | 42 | 8 | | | | | | |
| 3 | 27 | 62 | 4 | 6 | - | - | - | - | - | - | 6 | 5 | 10 | 7 | 16 | 9 | | | | | | |
| 4 | 3 | 62 | 4 | 12 | - | - | - | - | - | - | 10 | 6 | 3 | 6 | 13 | 9 | | | | | | |
| 4 | 10 | 62 | 4 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 4 | 5 | 5 | 19 | 6 | | | | | | |
| 4 | 17 | 62 | 4 | 27 | - | - | - | - | - | - | 8 | 6 | 7 | 7 | 15 | 9 | | | | | | |
| 4 | 24 | 62 | 5 | 23 | - | - | - | - | - | - | 3 | 7 | 7 | 8 | 10 | 11 | | | | | | |
| 4 | 30 | 62 | 6 | 25 | - | - | - | - | - | - | 2 | 4 | 9 | 6 | 11 | 7 | | | | | | |
| 5 | 1 | 62 | 6 | 21 | - | - | - | - | - | - | 11 | 6 | 19 | 7 | 30 | 9 | | | | | | |
| 5 | 14 | 62 | 6 | 20 | 0 | 0 | 12 | 1 | 12 | 1 | 2 | 5 | 8 | 7 | 10 | 9 | | | | | | |
| 5 | 22 | 62 | 6 | 26 | - | - | - | - | - | - | 2 | 6 | 3 | 8 | 5 | 10 | | | | | | |
| 5 | 29 | 62 | 6 | 29 | - | - | - | - | - | - | 1 | 3 | 10 | 4 | 11 | 5 | | | | | | |
| 6 | 5 | 62 | 7 | 3 | - | - | - | - | - | - | 8 | 5 | 12 | 7 | 20 | 9 | | | | | | |
| 6 | 12 | 62 | 7 | 11 | 0 | 0 | 1 | 1 | 1 | 1 | 5 | 5 | 11 | 7 | 16 | 9 | | | | | | |
| 6 | 19 | 62 | 7 | 16 | - | - | - | - | - | - | 12 | 5 | 7 | 8 | 19 | 9 | | | | | | |
| 6 | 26 | 62 | 8 | 2 | - | - | - | - | - | - | 2 | 6 | 8 | 7 | 10 | 9 | | | | | | |
| 7 | 3 | 62 | 8 | 6 | - | - | - | - | - | - | 34 | 6 | 43 | 7 | 77 | 9 | | | | | | |
| 7 | 17 | 62 | 8 | 10 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 5 | 14 | 7 | 14 | 9 | | | | | | |
| 7 | 24 | 62 | 8 | 14 | - | - | - | - | - | - | 3 | 5 | 14 | 7 | 17 | 8 | | | | | | |
| 7 | 31 | 62 | 8 | 22 | - | - | - | - | - | - | 0 | 7 | 4 | 6 | 4 | 9 | | | | | | |
| 8 | 7 | 62 | 8 | 27 | - | - | - | - | - | - | 3 | 7 | 8 | 8 | 11 | 11 | | | | | | |
| 8 | 14 | 62 | 8 | 29 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 6 | 12 | 7 | 18 | 9 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** INDIANA
**MAJOR BASIN** WESTERN GREAT LAKES
**MINOR BASIN** ST. JOSEPH RIVER
**STATION LOCATION** LAKE MICHIGAN AT
GARY, INDIANA 17

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 21 | 62 | 9 | 5 | – | – | – | – | – | – | 3 | 5 | 11 | 7 | 14 | 9 | | | | | | |
| 8 | 28 | 62 | 10 | 1 | – | – | – | – | – | – | 2 | 5 | 9 | 8 | 11 | 9 | | | | | | |
| 9 | 4 | 62 | 10 | 2 | – | – | – | – | – | – | 1 | 5 | 5 | 7 | 6 | 9 | | | | | | |
| 9 | 11 | 62 | 9 | 28 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 6 | 16 | 8 | 19 | 10 | | | | | | |
| 9 | 25 | 62 | 10 | 10 | – | – | – | – | – | – | 8 | 7 | 20 | 8 | 28 | 11 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** INDIANA
**MAJOR BASIN** WESTERN GREAT LAKES
**MINOR BASIN** ST. JOSEPH RIVER
**STATION LOCATION** LAKE MICHIGAN AT
GARY, INDIANA

17

| DATE OF SAMPLE | | | ALGAE (Number per milliliter) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 3 | 61 | 800 | 20 | 0 | 20 | 0 | 40 | 0 | 230 | 480 | 40 | 80 | 92 | 1 | 87 | 1 | | | | | | | | | | | | | | | | |
| 10 | 17 | 61 | 600 | 0 | 0 | 20 | 0 | 0 | 0 | 120 | 460 | 40 | 210 | 93 | 1 | | | | | | | | | | | | | | | | | | |
| 10 | 31 | 61 | 900 | 20 | 0 | 40 | 0 | 0 | 0 | 250 | 620 | 20 | 80 | 77 | 2 | 71 | 1 | 87 | 1 | | | | | | | | | | | | | | |
| 11 | 19 | 61 | 2400 | 40 | 0 | 20 | 0 | 0 | 0 | 520 | 1840 | 230 | 560 | 77 | 2 | 84 | 2 | 93 | 2 | 69 | 1 | 80 | 1 | | | | | | | | | | |
| 11 | 21 | 61 | 1900 | 0 | 0 | 60 | 120 | 0 | 0 | 370 | 1390 | 60 | 170 | 77 | 3 | 93 | 1 | 71 | 1 | | | | | | | | | | | | | | |
| 12 | 5 | 61 | 1400 | 60 | 0 | 20 | 0 | 20 | 60 | 250 | 1010 | 80 | 310 | 93 | 2 | 77 | 1 | | | | | | | | | | | | | | | | |
| 12 | 19 | 61 | 1100 | 0 | 0 | 20 | 20 | 0 | 0 | 270 | 790 | 60 | 170 | 93 | 2 | 68 | 1 | | | | | | | | | | | | | | | | |
| 1 | 9 | 62 | 1700 | 0 | 0 | 0 | 0 | 0 | 0 | 580 | 1120 | 980 | 3100 | 71 | 2 | 93 | 2 | 92 | 2 | 77 | 1 | | | | | | | | | | | | |
| 1 | 16 | 62 | 1900 | 20 | 0 | 20 | 0 | 20 | 20 | 850 | 950 | 310 | 660 | 71 | 2 | 93 | 2 | | | | | | | | | | | | | | | | |
| 2 | 6 | 62 | 5500 | 0 | 70 | 0 | 0 | 70 | 20 | 1980 | 3380 | 830 | 450 | 71 | 4 | 69 | 2 | 80 | 2 | 92 | 2 | | | | | | | | | | | | |
| 2 | 20 | 62 | 1800 | 0 | 0 | 130 | 0 | 0 | 0 | 990 | 640 | 170 | 80 | 93 | 2 | 69 | 1 | 71 | 1 | | | | | | | | | | | | | | |
| 3 | 6 | 62 | 1000 | 0 | 0 | 0 | 0 | 40 | 0 | 810 | 150 | 60 | 60 | 71 | 3 | | | | | | | | | | | | | | | | | | |
| 3 | 20 | 62 | 3400 | 0 | 0 | 60 | 0 | 20 | 0 | 3150 | 190 | 540 | 100 | 71 | 5 | 69 | 1 | | | | | | | | | | | | | | | | |
| 4 | 3 | 62 | 4100 | 0 | 0 | 40 | 0 | 80 | 120 | 1950 | 1880 | 750 | 410 | 71 | 4 | 92 | 3 | 69 | 2 | 84 | 1 | 77 | 1 | | | | | | | | | | |
| 4 | 17 | 62 | 7500 | 0 | 0 | 180 | 0 | 20 | 140 | 3750 | 3410 | 1040 | 1060 | 71 | 5 | 92 | 4 | 77 | 3 | 84 | 1 | 93 | 1 | 69 | 1 | 82 | 1 | 88 | 1 | 25 | 1 | | |
| 5 | 1 | 62 | 3900 | 0 | 60 | 190 | 0 | 60 | 190 | 970 | 2380 | 170 | 640 | 92 | 4 | 93 | 1 | 71 | 3 | 25 | 1 | 77 | 1 | 68 | 1 | 88 | 1 | | | | | | |
| 5 | 15 | 62 | 1900 | 0 | 0 | 0 | 0 | 0 | 0 | 820 | 1080 | 360 | 380 | 71 | 3 | 92 | 2 | 93 | 1 | 84 | 1 | | | | | | | | | | | | |
| 6 | 5 | 62 | 1900 | 0 | 60 | 0 | 40 | 20 | 0 | 380 | 1370 | 150 | 490 | 92 | 3 | 71 | 1 | | | | | | | | | | | | | | | | |
| 6 | 19 | 62 | 3700 | 0 | 20 | 20 | 0 | 20 | 500 | 850 | 2260 | 210 | 190 | 92 | 4 | 71 | 3 | 61 | 2 | 93 | 1 | 88 | 1 | 77 | 1 | | | | | | | | |
| 7 | 3 | 62 | 4100 | 0 | 0 | 0 | 40 | 0 | 40 | 250 | 3710 | 80 | 80 | 93 | 4 | 92 | 2 | 84 | 1 | 69 | 1 | | | | | | | | | | | | |
| 7 | 17 | 62 | 500 | 0 | 0 | 90 | 0 | 20 | 0 | 50 | 340 | 50 | 270 | | | | | | | | | | | | | | | | | | | | |
| 8 | 7 | 62 | 600 | 0 | 0 | 60 | 0 | 60 | 0 | 40 | 420 | 80 | 80 | 93 | 1 | | | | | | | | | | | | | | | | | | |
| 8 | 21 | 62 | 500 | 40 | 0 | 130 | 0 | 0 | 0 | 0 | 380 | 0 | 20 | 93 | 1 | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 1100 | 0 | 0 | 80 | 0 | 100 | 150 | 170 | 620 | 120 | 0 | 93 | 1 | 77 | 1 | | | | | | | | | | | | | | | | |
| 9 | 18 | 62 | 300 | 0 | 0 | 10 | 0 | 0 | 10 | 0 | 250 | 40 | 320 | | | | | | | | | | | | | | | | | | | | |

**STATION LOCATION** LAKE MICHIGAN AT

GARY, INDIANA 017

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 3 | 61 | 95 | 44 | 56 | 22 | 47 | 10 | 82 | 8 | 16 | 120 | 0 | 14 | 22 | 1 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 10 | 17 | 61 | 95 | 47 | 47 | 33 | 56 | 5 | 60 | 3 | 12 | 0 | 0 | 13 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 10 | 31 | 61 | 95 | 39 | 47 | 23 | 56 | 16 | 45 | 6 | 16 | 0 | 0 | 8 | 20 | 1 | | | | | | | | | 8 | 51 | 2 | | | | | 0 | 0 |
| 11 | 19 | 61 | 95 | 43 | 47 | 19 | 45 | 10 | 49 | 7 | 21 | 0 | 0 | 12 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 21 | 61 | 95 | 54 | 47 | 10 | 9 | 9 | 45 | 5 | 22 | 0 | 0 | 2 | | | | | | | | | | | 2 | | | | | | | 2 | 0 |
| 12 | 5 | 61 | 95 | 73 | 47 | 8 | 21 | 4 | 49 | 2 | 13 | 0 | 0 | 23 | 11 | 1 | 14 | 1 | | | | | | | 2 | | | | | | | 0 | 0 |
| 12 | 19 | 61 | 95 | 81 | 47 | 7 | 96 | 5 | 92 | 3 | 4 | 0 | 0 | 8 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 1 | 9 | 62 | 95 | 87 | 47 | 4 | 56 | 2 | 49 | 2 | 5 | 0 | 0 | 5 | | | | | | | | | | | 5 | 76 | 1 | | | | | 0 | 0 |
| 1 | 16 | 62 | 95 | 59 | 60 | 11 | 47 | 10 | 82 | 5 | 15 | 0 | 0 | 10 | 11 | 1 | | | | | | | | | 9 | 76 | 1 | 77 | 1 | | | 0 | 0 |
| 2 | 6 | 62 | 95 | 51 | 60 | 26 | 80 | 4 | 21 | 3 | 16 | 0 | 0 | 5 | | | | | | | | | | | 6 | 76 | 1 | | | | | 0 | 0 |
| 2 | 20 | 62 | 95 | 31 | 60 | 15 | 59 | 9 | 92 | 7 | 38 | 60 | 0 | 39 | 46 | 3 | 47 | 1 | | | | | | | 8 | 76 | 2 | | | | | 0 | 0 |
| 3 | 6 | 62 | 95 | 29 | 82 | 26 | 60 | 22 | 47 | 10 | 13 | 0 | 0 | 35 | 46 | 2 | 47 | 1 | | | | | | | 2 | | | | | | | 0 | 0 |
| 3 | 20 | 62 | 82 | 54 | 95 | 19 | 92 | 6 | 60 | 6 | 15 | 0 | 0 | 26 | 14 | 3 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 3 | 62 | 82 | 27 | 95 | 18 | 47 | 12 | 84 | 10 | 33 | 0 | 0 | 29 | 14 | 2 | 11 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 17 | 62 | 82 | 26 | 47 | 17 | 95 | 15 | 92 | 11 | 31 | 0 | 0 | 148 | 14 | 4 | 11 | 4 | 15 | 1 | | | | | 4 | 50 | 1 | | | | | 1 | 0 |
| 5 | 1 | 62 | 47 | 36 | 92 | 23 | 95 | 15 | 80 | 4 | 22 | 20 | 0 | 22 | 15 | 2 | 6 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 15 | 62 | 47 | 31 | 95 | 18 | 89 | 13 | 82 | 12 | 26 | 0 | 0 | 30 | 15 | 3 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 5 | 62 | 95 | 52 | 47 | 19 | 92 | 13 | 89 | 6 | 10 | 0 | 0 | 43 | 15 | 3 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 19 | 62 | 95 | 71 | 92 | 17 | 82 | 2 | 35 | 2 | 8 | 0 | 0 | 279 | 17 | 5 | 11 | 5 | 10 | 2 | 46 | 2 | 15 | 1 | 8 | 51 | 1 | 76 | 1 | | | 0 | 0 |
| 7 | 3 | 62 | 95 | 71 | 47 | 13 | 92 | 7 | 89 | 2 | 7 | 80 | 0 | 170 | 11 | 5 | 17 | 4 | 1 | 1 | | | | | 18 | 76 | 1 | 51 | 1 | | | 0 | 0 |
| 7 | 17 | 62 | 95 | 64 | 47 | 15 | 56 | 4 | 92 | 3 | 14 | 70 | 0 | 183 | 11 | 5 | 16 | 4 | 15 | 3 | 5 | 2 | 17 | 1 | 37 | 51 | 4 | 76 | 1 | 50 | 1 | 0 | 0 |
| 8 | 7 | 62 | 95 | 70 | 47 | 9 | 24 | 4 | 56 | 3 | 14 | 0 | 0 | 81 | 17 | 3 | 11 | 2 | 15 | 1 | 21 | 1 | | | 12 | 51 | 3 | | | | | 0 | 0 |
| 8 | 21 | 62 | 45 | 35 | 95 | 28 | 47 | 24 | 56 | 6 | 7 | 0 | 0 | 162 | 17 | 5 | 21 | 3 | 15 | 3 | 11 | 2 | | | 28 | 52 | 3 | 76 | 2 | 51 | 2 | 3 | 0 |
| 9 | 4 | 62 | 95 | 73 | 45 | 8 | 47 | 7 | 24 | 3 | 9 | 0 | 0 | 226 | 11 | 5 | 17 | 4 | 16 | 1 | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 18 | 62 | 95 | 69 | 47 | 17 | 56 | 3 | 80 | 2 | 9 | 0 | 0 | 100 | 11 | 4 | 22 | 2 | 15 | 1 | 17 | 1 | | | 3 | 51 | 1 | | | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** INDIANA
**MAJOR BASIN** WESTERN GREAT LAKES
**MINOR BASIN** ST. JOSEPH RIVER
**STATION LOCATION** LAKE MICHIGAN AT
GARY, INDIANA

17

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 3 | 61 | 10 | 10 | 5060 | 142 | 25 | 117 | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 7 | 61 | 11 | 16 | 5000 | 176 | 50 | 126 | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 7 | 61 | | * | 10060 | 160 | 38 | 122 | 3 | 9 | 12 | 2 | 1 | 9 | 0 | 5 | 3 | 1 | 5 |
| 1 | 2 | 62 | 1 | 12 | 5140 | 121 | 33 | 88 | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 6 | 62 | 2 | 15 | 5470 | 89 | 21 | 68 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 6 | 62 | 3 | 15 | 5210 | 127 | 36 | 91 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 6 | 62 | | * | 15820 | 112 | 30 | 82 | 2 | 7 | 12 | 2 | 2 | 8 | 0 | 4 | 1 | 1 | 3 |
| 4 | 3 | 62 | 4 | 12 | 4940 | 110 | 30 | 80 | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 1 | 62 | 5 | 10 | 5020 | 94 | 41 | 53 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 5 | 62 | 6 | 15 | 4980 | 91 | 39 | 52 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 5 | 62 | | * | 14940 | 99 | 37 | 62 | 2 | 11 | 13 | 2 | 1 | 8 | 2 | 5 | 2 | 1 | 3 |
| 7 | 3 | 62 | 7 | 12 | 5270 | 117 | 45 | 72 | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 7 | 62 | 8 | 16 | 5060 | 139 | 45 | 94 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 5 | 62 | 9 | 12 | 4810 | 129 | 36 | 93 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 5 | 62 | | * | 15140 | 128 | 42 | 86 | 1 | 11 | 13 | 1 | 1 | 10 | 1 | 5 | 3 | 1 | 8 |

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** INDIANA
**MAJOR BASIN** WESTERN GREAT LAKES
**MINOR BASIN** ST. JOSEPH RIVER
**STATION LOCATION** LAKE MICHIGAN AT
GARY, INDIANA 17

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORM per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 3 | 61 | 11.1 | 7.4 | 8.0 | - | 12 | .9 | - | .0 | 8 | 107 | 136 | 0 | 5 | 18 | .0 | 183 | 90 |
| 10 | 10 | 61 | 13.9 | 8.0 | 8.0 | .3 | 12 | .7 | 2.2 | .0 | 10 | 109 | 132 | 0 | 4 | 22 | .0 | 148 | 290 |
| 10 | 17 | 61 | 14.6 | 9.4 | 8.1 | .4 | 12 | .9 | 2.2 | .0 | 10 | 112 | 136 | 0 | 9 | 22 | .0 | 150 | 38 |
| 10 | 24 | 61 | 14.0 | 9.2 | 8.0 | .9 | 13 | 1.2 | 2.5 | .0 | 10 | 112 | 132 | 5 | 13 | 20 | .0 | 147 | 170 |
| 10 | 31 | 61 | 12.9 | 10.2 | 8.0 | .5 | 14 | 1.2 | - | .0 | 10 | 112 | 132 | 5 | 9 | 22 | .0 | 153 | 56 |
| 11 | 7 | 61 | 11.1 | 10.6 | 8.1 | .7 | 14 | 1.5 | 2.5 | .0 | 9 | 113 | 140 | 5 | 5 | 18 | - | 156 | 200 |
| 11 | 14 | 61 | 10.2 | 10.7 | 7.9 | 1.3 | 13 | 1.5 | 3.6 | .1 | 11 | 110 | 140 | 10 | 11 | 30 | - | 183 | 720 |
| 11 | 21 | 61 | 8.3 | 11.3 | 8.3 | .9 | 10 | 1.0 | 2.9 | .0 | 10 | 113 | 140 | 5 | 15 | 22 | - | 166 | *2 |
| 11 | 28 | 61 | 7.9 | 11.3 | 8.0 | .7 | 16 | 1.6 | 3.2 | .1 | 9 | 113 | 140 | 10 | 53 | 22 | - | 153 | 580 |
| 12 | 5 | 61 | 7.0 | 12.0 | 8.2 | .4 | 11 | .8 | 2.2 | .0 | 9 | 120 | 136 | 10 | 27 | 22 | .1 | 158 | 20 |
| 12 | 12 | 61 | 4.9 | 12.5 | 8.0 | .7 | 13 | 1.5 | 3.3 | .1 | 10 | 116 | 140 | 0 | 10 | 24 | .0 | 162 | 10 |
| 12 | 19 | 61 | 2.9 | 13.2 | 7.8 | .7 | 13 | 1.5 | 3.2 | .0 | 10 | 116 | 140 | 10 | 9 | 28 | .0 | 156 | - |
| 1 | 9 | 62 | 2.0 | 14.1 | 7.9 | .5 | 15 | 2.2 | 4.4 | .0 | 10 | 113 | 140 | 10 | 20 | 22 | .0 | 175 | *2 |
| 1 | 16 | 62 | 1.5 | 13.4 | 8.0 | 1.3 | 14 | 3.9 | 4.5 | 2.4 | 10 | 120 | 144 | 5 | 19 | 36 | .0 | 174 | 40 |
| 1 | 22 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 14 |
| 1 | 23 | 62 | 1.8 | 13.9 | 8.0 | 1.1 | 26 | 1.5 | 3.3 | .1 | 8 | 124 | 144 | 5 | 15 | 26 | .0 | 186 | - |
| 1 | 30 | 62 | 1.6 | 14.5 | 8.0 | 1.3 | 18 | 1.2 | 2.3 | .1 | 10 | 124 | 148 | 10 | 15 | 24 | .0 | 161 | 420 |
| 2 | 6 | 62 | 1.7 | 14.5 | 8.1 | 1.2 | 18 | .8 | 2.3 | .0 | 10 | 128 | 148 | 25 | 28 | 22 | .2 | 164 | 130 |
| 2 | 13 | 62 | 2.1 | 14.6 | 8.1 | .3 | 17 | .6 | 2.3 | .0 | 10 | 124 | 144 | 5 | 12 | 19 | .0 | 155 | *2 |
| 2 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 80 |
| 2 | 20 | 62 | 1.9 | 14.2 | 8.0 | 1.0 | 15 | 1.3 | 3.3 | .1 | 10 | 126 | 140 | 5 | 7 | 28 | .0 | 173 | - |
| 2 | 27 | 62 | 2.2 | 14.5 | 8.1 | .7 | 13 | 1.2 | 3.7 | .1 | 10 | 128 | 144 | 5 | 8 | 26 | .1 | 165 | 200 |
| 3 | 6 | 62 | 2.3 | 14.4 | 7.9 | 1.2 | 16 | 3.4 | 5.1 | .1 | 10 | 128 | 148 | 10 | 11 | 32 | .0 | 178 | 120 |
| 3 | 13 | 62 | 2.3 | 14.5 | 8.1 | .5 | 31 | 1.2 | 3.4 | .0 | 12 | 130 | 144 | 10 | 8 | 28 | .0 | 168 | 2 |
| 3 | 20 | 62 | 2.7 | 13.8 | 8.1 | .7 | 14 | 2.8 | 4.6 | .0 | 10 | 138 | 148 | 15 | 11 | 26 | .0 | 186 | 14 |
| 3 | 27 | 62 | 3.9 | 13.7 | 8.2 | .9 | 18 | 1.2 | 3.2 | .0 | 8 | 139 | 140 | 10 | 15 | 25 | .0 | 161 | 54 |
| 4 | 3 | 62 | 4.8 | 13.1 | 8.1 | .8 | 19 | 1.1 | 2.9 | .0 | 10 | 132 | 144 | 10 | 12 | 22 | .0 | 151 | 6 |
| 4 | 10 | 62 | 6.4 | 11.8 | 8.0 | 1.1 | 20 | 1.5 | 3.7 | .4 | 10 | 116 | 136 | 15 | 12 | 31 | .1 | 161 | 360 |
| 4 | 17 | 62 | 6.1 | 12.4 | 8.2 | .5 | 20 | 1.4 | 3.4 | .3 | 8 | 124 | 131 | 10 | 20 | 22 | .0 | 160 | 8 |
| 4 | 24 | 62 | 7.9 | 12.2 | 8.2 | .7 | 13 | .8 | 2.8 | .0 | 8 | 124 | 130 | 5 | 14 | 19 | .2 | 161 | 38 |
| 5 | 1 | 62 | 9.2 | 12.0 | 8.0 | .1 | 18 | .8 | 2.3 | .0 | 9 | 124 | 131 | 5 | 2 | 18 | .1 | 151 | 6 |
| 5 | 8 | 62 | 12.1 | 10.5 | 8.0 | 1.0 | 18 | .5 | 2.9 | .1 | 8 | 123 | 128 | 5 | 7 | 22 | .0 | 155 | 40 |
| 5 | 15 | 62 | 11.8 | 10.4 | 8.0 | .4 | 17 | .4 | 3.0 | .0 | 10 | 124 | 130 | 0 | 4 | 22 | .0 | 162 | 4 |
| 5 | 22 | 62 | 14.2 | 9.9 | 8.1 | 1.0 | 15 | .4 | 2.9 | .1 | 7 | 123 | 126 | 5 | 3 | 22 | .0 | 158 | 44 |
| 5 | 29 | 62 | 13.1 | 10.5 | 8.1 | .4 | 19 | .4 | - | .1 | 10 | 125 | 130 | 5 | 4 | 17 | .0 | 145 | 340 |
| 6 | 5 | 62 | 14.3 | 10.1 | 8.0 | .3 | 18 | .7 | 2.8 | .1 | 9 | 123 | 126 | 5 | 5 | 24 | .0 | 152 | 200 |
| 6 | 12 | 62 | 17.4 | 9.0 | 8.1 | 1.4 | 29 | 1.0 | 3.2 | .1 | 10 | 127 | 129 | 30 | 25 | 26 | - | 151 | 300 |
| 6 | 19 | 62 | 17.3 | 9.1 | 8.1 | 1.7 | 17 | .8 | 3.0 | .0 | 8 | 124 | 129 | 5 | 7 | 18 | - | 173 | 520 |
| 6 | 26 | 62 | 16.3 | 7.8 | 8.0 | - | 19 | .4 | 2.9 | .0 | 10 | 127 | 128 | 10 | 8 | 24 | - | 156 | 150 |

**MINOR BASIN** ST. JOSEPH RIVER

**STATION LOCATION** LAKE MICHIGAN AT

GARY, INDIANA

1

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFOR per 100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 3 | 62 | 14.0 | 8.8 | 8.0 | 2.0 | 18 | .8 | - | .2 | 9 | 127 | 128 | 5 | 5 | 32 | - | 157 | |
| 7 | 10 | 62 | 21.6 | 7.8 | 8.3 | .4 | 17 | .4 | 1.9 | .2 | 9 | 126 | 125 | 5 | 5 | 22 | - | 168 | 2 |
| 7 | 17 | 62 | 20.9 | 8.1 | 8.2 | .8 | 13 | .8 | 2.3 | .1 | 9 | 125 | 126 | 5 | 7 | 24 | .1 | 156 | 4 |
| 7 | 24 | 62 | 21.7 | 6.8 | 8.1 | 1.1 | 14 | .7 | 2.9 | .3 | 7 | 126 | 127 | 10 | 5 | 20 | .2 | 168 | |
| 7 | 31 | 62 | 21.1 | 7.6 | 8.3 | .7 | 15 | .4 | 2.3 | .1 | 10 | 122 | 127 | 5 | 3 | 20 | .1 | 158 | 2 |
| 8 | 7 | 62 | 20.0 | 6.5 | 8.2 | .4 | 14 | .8 | 3.2 | .1 | 6 | 124 | 132 | 5 | 1 | 22 | - | 153 | |
| 8 | 14 | 62 | 22.5 | 7.3 | 8.2 | 1.0 | 11 | 1.3 | 3.8 | .3 | 11 | 124 | 130 | 10 | 15 | 22 | .0 | 144 | |
| 8 | 21 | 62 | 22.3 | 7.2 | 8.3 | .5 | 11 | 1.2 | 3.2 | .0 | 7 | 122 | 130 | 5 | 3 | 24 | .0 | 174 | |
| 8 | 28 | 62 | 20.4 | 7.0 | 8.1 | .6 | 12 | 1.3 | 3.2 | .1 | 7 | 118 | 128 | 5 | 3 | 27 | .0 | 155 | |
| 9 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 6 |
| 9 | 4 | 62 | 13.2 | 7.9 | 8.0 | 1.1 | 13 | 1.0 | 2.5 | .1 | 6 | 124 | 131 | 5 | 4 | 23 | .0 | 161 | |
| 9 | 11 | 62 | 18.3 | 7.9 | 8.1 | .6 | 18 | 1.2 | 2.2 | .1 | 6 | 122 | 129 | 5 | 4 | 27 | .0 | 151 | |
| 9 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| 9 | 25 | 62 | 18.3 | 9.2 | 8.2 | .8 | 22 | 1.3 | 2.5 | .1 | 6 | 122 | 135 | 5 | 6 | 24 | - | 160 | 1 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Supplied by U.S. Army Corps of Engineers
U.S. Lake Survey

MAJOR BASIN Western Great Lakes
MINOR BASIN St. Joseph River
STATION LOCATION Lake Michigan at Gary, Indiana

| October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|

FLOW DATA NOT APPLICABLE --- LAKE LEVELS ONLY

# RADIOACTIVITY DETERMINATIONS

**STATE** WISCONSIN
**MAJOR BASIN** WESTERN GREAT LAKES
**MINOR BASIN** LAKE MICHIGAN-WESTERN SHORE
**STATION LOCATION** LAKE MICHIGAN AT
MILWAUKEE, WISCONSIN 65

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 12 | - | - | - | - | - | - | 6 | 5 | 11 | 7 | 17 | 9 | | | | | | |
| 10 | 9 | 61 | 10 | 24 | - | - | - | - | - | - | 2 | 5 | 4 | 7 | 6 | 9 | | | | | | |
| 10 | 11 | 61 | 10 | 27 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 4 | 10 | 5 | 10 | 6 | | | | | | |
| 10 | 23 | 61 | 11 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 4 | 3 | 5 | 7 | 6 | | | | | | |
| 10 | 30 | 61 | 11 | 6 | - | - | - | - | - | - | 14 | 5 | 9 | 6 | 23 | 8 | | | | | | |
| 11 | 6 | 61 | 11 | 17 | - | - | - | - | - | - | 3 | 5 | 4 | 6 | 7 | 8 | | | | | | |
| 11 | 13 | 61 | 11 | 27 | - | - | - | - | - | - | 13 | 5 | 8 | 6 | 21 | 8 | | | | | | |
| 11 | 20 | 61 | 11 | 28 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 5 | 16 | 7 | 22 | 9 | | | | | | |
| 11 | 27 | 61 | 12 | 4 | - | - | - | - | - | - | 6 | 5 | 10 | 7 | 16 | 9 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | - | - | - | - | - | - | 9 | 5 | 11 | 6 | 20 | 8 | | | | | | |
| 12 | 11 | 61 | 12 | 19 | - | - | - | - | - | - | 0 | 6 | 5 | 7 | 5 | 9 | | | | | | |
| 12 | 18 | 61 | 12 | 27 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 4 | 10 | 5 | 11 | 6 | | | | | | |
| 1 | 2 | 62 | 1 | 12 | - | - | - | - | - | - | 6 | 5 | 3 | 6 | 9 | 8 | | | | | | |
| 1 | 8 | 62 | 1 | 24 | - | - | - | - | - | - | 20 | 6 | 8 | 5 | 28 | 8 | | | | | | |
| 1 | 15 | 62 | 1 | 24 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 6 | 6 | 6 | 10 | 8 | | | | | | |
| 1 | 22 | 62 | 1 | 31 | - | - | - | - | - | - | 3 | 5 | 6 | 6 | 9 | 7 | | | | | | |
| 1 | 29 | 62 | 2 | 7 | - | - | - | - | - | - | 0 | 5 | 9 | 7 | 9 | 9 | | | | | | |
| 2 | 5 | 62 | 2 | 13 | - | - | - | - | - | - | 0 | 5 | 9 | 6 | 9 | 7 | | | | | | |
| 2 | 12 | 62 | 2 | 20 | - | - | - | - | - | - | 4 | 4 | 7 | 5 | 11 | 7 | | | | | | |
| 2 | 19 | 62 | 3 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 8 | 5 | 12 | 5 | 20 | 7 | | | | | | |
| 2 | 26 | 62 | 3 | 9 | - | - | - | - | - | - | 7 | 5 | 8 | 7 | 15 | 9 | | | | | | |
| 3 | 5 | 62 | 3 | 14 | - | - | - | - | - | - | 5 | 5 | 1 | 6 | 6 | 7 | | | | | | |
| 3 | 12 | 62 | 3 | 20 | - | - | - | - | - | - | 2 | 4 | 8 | 5 | 10 | 6 | | | | | | |
| 3 | 19 | 62 | 3 | 30 | 1 | 1 | 1 | 1 | 2 | 1 | 3 | 4 | 9 | 5 | 12 | 6 | | | | | | |
| 3 | 26 | 62 | 4 | 5 | - | - | - | - | - | - | 0 | 5 | 11 | 7 | 11 | 9 | | | | | | |
| 4 | 2 | 62 | 4 | 16 | - | - | - | - | - | - | 20 | 5 | 14 | 7 | 34 | 9 | | | | | | |
| 4 | 9 | 62 | 4 | 25 | - | - | - | - | - | - | 10 | 5 | 11 | 7 | 21 | 8 | | | | | | |
| 4 | 16 | 62 | 5 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 5 | 3 | 7 | 9 | 9 | | | | | | |
| 4 | 23 | 62 | 5 | 23 | - | - | - | - | - | - | 6 | 7 | 1 | 8 | 7 | 11 | | | | | | |
| 4 | 30 | 62 | 6 | 19 | - | - | - | - | - | - | 2 | 5 | 5 | 7 | 7 | 9 | | | | | | |
| 5 | 7 | 62 | 6 | 8 | - | - | - | - | - | - | 6 | 7 | 8 | 8 | 14 | 11 | | | | | | |
| 5 | 14 | 62 | 7 | 19 | - | - | - | - | - | - | 3 | 6 | 9 | 7 | 12 | 9 | | | | | | |
| 5 | 21 | 62 | 6 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 6 | 7 | 11 | 9 | | | | | | |
| 5 | 28 | 62 | 6 | 27 | - | - | - | - | - | - | 3 | 5 | 7 | 7 | 10 | 9 | | | | | | |
| 6 | 4 | 62 | 7 | 3 | - | - | - | - | - | - | 2 | 5 | 6 | 6 | 8 | 8 | | | | | | |
| 6 | 11 | 62 | 7 | 5 | - | - | - | - | - | - | 3 | 6 | 4 | 7 | 7 | 9 | | | | | | |
| 6 | 18 | 62 | 7 | 14 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 3 | 6 | 4 | 8 | 5 | | | | | | |
| 6 | 25 | 62 | 7 | 18 | - | - | - | - | - | - | 0 | 5 | 10 | 7 | 10 | 9 | | | | | | |
| 7 | 2 | 62 | 8 | 10 | - | - | - | - | - | - | 3 | 3 | 9 | 3 | 12 | 4 | | | | | | |
| 7 | 16 | 62 | 8 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 5 | 11 | 7 | 14 | 9 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 7 | 25 | 62 | 10 | 1 | – | – | – | – | – | – | 6 | 5 | 3 | 7 | 9 | 8 | | | | | | |
| 7 | 30 | 62 | 8 | 21 | – | – | – | – | – | – | 6 | 5 | 18 | 7 | 24 | 9 | | | | | | |
| 8 | 6 | 62 | 8 | 17 | – | – | – | – | – | – | 2 | 5 | 8 | 7 | 10 | 9 | | | | | | |
| 8 | 13 | 62 | 8 | 30 | – | – | – | – | – | – | 3 | 5 | 9 | 7 | 12 | 8 | | | | | | |
| 8 | 20 | 62 | 8 | 31 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 5 | 6 | 7 | 10 | 9 | | | | | | |
| 8 | 27 | 62 | 9 | 10 | – | – | – | – | – | – | 3 | 5 | 21 | 7 | 24 | 9 | | | | | | |
| 9 | 10 | 62 | 9 | 21 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 6 | 8 | 8 | 10 | 10 | | | | | | |
| 9 | 17 | 62 | 10 | 4 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 6 | 9 | 8 | 10 | 10 | | | | | | |
| 9 | 24 | 62 | 11 | 1 | – | – | – | – | – | – | 1 | 5 | 6 | 7 | 7 | 9 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** WISCONSIN
**MAJOR BASIN** WESTERN GREAT LAKES
**MINOR BASIN** LAKE MICHIGAN-WESTERN SHORE
**STATION LOCATION** LAKE MICHIGAN AT MILWAUKEE, WISCONSIN

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for C* | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | |
| 10 | 2 | 61 | 400 | 20 | 0 | 20 | 0 | 20 | 0 | 290 | 80 | 60 | 120 | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 800 | 0 | 0 | 20 | 0 | 0 | 0 | 170 | 580 | 40 | 150 | 93 | 1 | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 400 | 40 | 20 | 20 | 0 | 0 | 20 | 60 | 250 | 40 | 100 | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 600 | 20 | 0 | 0 | 0 | 50 | 20 | 340 | 160 | 160 | 90 | 71 | 1 | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 170 | 170 | 40 | 80 | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 600 | 0 | 0 | 20 | 0 | 0 | 0 | 360 | 230 | 20 | 110 | 71 | 1 | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 500 | 0 | 0 | 20 | 0 | 20 | 20 | 230 | 190 | 20 | 170 | 71 | 1 | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 900 | 0 | 0 | 40 | 0 | 0 | 0 | 290 | 560 | 80 | 100 | 84 | 1 | 93 | 1 | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 1100 | 0 | 0 | 0 | 0 | 0 | 0 | 740 | 340 | 90 | 0 | 71 | 2 | 84 | 1 | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 4800 | 210 | 40 | 80 | 0 | 0 | 60 | 1500 | 2870 | 350 | 290 | 84 | 3 | 69 | 1 | 3 | 1 | 93 | 1 | 71 | 1 | | | | | | | | |
| 3 | 5 | 62 | 400 | 0 | 0 | 40 | 0 | 0 | 0 | 320 | 60 | 0 | 60 | 71 | 1 | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 1900 | 40 | 0 | 100 | 0 | 40 | 20 | 1660 | 80 | 210 | 80 | 71 | 4 | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 900 | 0 | 0 | 0 | 0 | 20 | 20 | 600 | 230 | 60 | 100 | 71 | 2 | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 500 | 0 | 0 | 0 | 0 | 0 | 20 | 160 | 310 | 20 | 110 | 71 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 1700 | 0 | 0 | 80 | 0 | 0 | 40 | 950 | 650 | 60 | 40 | 71 | 3 | 92 | 2 | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 4200 | 0 | 230 | 60 | 40 | 20 | 0 | 2050 | 1840 | 970 | 440 | 71 | 4 | 92 | 3 | 17 | 1 | | | | | | | | | | | | |
| 6 | 4 | 62 | 4200 | 0 | 110 | 20 | 0 | 0 | 40 | 3500 | 570 | 460 | 300 | 71 | 5 | 92 | 1 | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 1600 | 0 | 0 | 0 | 0 | 0 | 0 | 970 | 630 | 80 | 170 | 71 | 3 | 92 | 1 | 93 | 1 | | | | | | | | | | | | |
| 7 | 2 | 62 | 600 | 0 | 0 | 80 | 0 | 0 | 20 | 150 | 370 | 20 | 40 | 93 | 2 | 92 | 2 | 84 | 1 | | | | | | | | | | | | |
| 7 | 16 | 62 | 1900 | 250 | 0 | 70 | 0 | 0 | 0 | 650 | 970 | 230 | 0 | 92 | 3 | 69 | 3 | 2 | 1 | | | | | | | | | | | | |
| 8 | 6 | 62 | 2200 | 0 | 0 | 210 | 0 | 150 | 80 | 700 | 1100 | 120 | 170 | 89 | 3 | 71 | 3 | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 420 | 0 | 80 | 93 | 1 | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 600 | 0 | 0 | 40 | 0 | 0 | 80 | 120 | 370 | 40 | 40 | 93 | 1 | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 2400 | 0 | 80 | 40 | 0 | 0 | 80 | 630 | 1520 | 250 | 210 | 68 | 2 | 77 | 1 | 93 | 1 | 69 | 1 | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 95 | 54 | 47 | 33 | 9 | 2 | 89 | 2 | 9 | 410 | 0 | 74 | 11 | 3 | 17 | 3 | 22 | 1 | | | | | 3 | 76 | 1 | | | | | 0 | 0 |
| 10 | 16 | 61 | 95 | 70 | 47 | 14 | 45 | 2 | 96 | 2 | 12 | 0 | 0 | 5 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 95 | 72 | 47 | 9 | 35 | 5 | 60 | 2 | 12 | 0 | 0 | 16 | 11 | 1 | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 95 | 62 | 47 | 15 | 82 | 9 | 60 | 4 | 10 | 0 | 0 | 21 | 11 | 2 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 95 | 51 | 47 | 13 | 60 | 7 | 48 | 6 | 23 | 0 | 0 | 8 | 11 | 1 | | | | | | | | | 5 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 95 | 36 | 47 | 33 | 82 | 10 | 60 | 6 | 15 | 0 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 95 | 27 | 60 | 18 | 47 | 16 | 82 | 9 | 30 | 0 | 0 | 3 | | | | | | | | | | | 3 | 76 | 1 | | | | | 0 | 0 |
| 1 | 15 | 62 | 48 | 19 | 95 | 15 | 60 | 12 | 84 | 7 | 47 | 0 | 0 | 0 | | | | | | | | | | | 4 | 51 | 1 | | | | | 0 | 0 |
| 2 | 5 | 62 | 82 | 13 | 47 | 12 | 46 | 10 | 92 | 9 | 56 | 0 | 0 | 2 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 95 | 14 | 48 | 12 | 60 | 12 | 46 | 7 | 55 | 190 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 60 | 27 | 92 | 17 | 47 | 13 | 95 | 11 | 32 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 92 | 25 | 60 | 18 | 47 | 17 | 84 | 7 | 33 | 40 | 0 | 3 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 47 | 26 | 92 | 25 | 82 | 12 | 49 | 9 | 28 | 0 | 0 | 0 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 48 | 24 | 82 | 20 | 92 | 11 | 47 | 9 | 36 | 0 | 0 | 2 | | | | | | | | | | | 4 | | | | | | | 1 | 0 |
| 5 | 7 | 62 | 47 | 31 | 92 | 20 | 95 | 10 | 91 | 6 | 33 | 0 | 0 | 2 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 47 | 38 | 95 | 19 | 92 | 17 | 82 | 9 | 17 | 0 | 0 | 7 | | | | | | | | | | | 7 | 50 | 1 | | | | | 0 | 0 |
| 6 | 4 | 62 | 82 | 56 | 95 | 13 | 47 | 9 | 92 | 7 | 15 | 0 | 0 | 14 | | | | | | | | | | | 6 | 50 | 1 | | | | | 0 | 0 |
| 6 | 18 | 62 | 95 | 24 | 89 | 19 | 82 | 19 | 47 | 16 | 22 | 0 | 0 | 12 | 21 | 1 | | | | | | | | | 38 | 76 | 4 | 50 | 1 | | | 0 | 0 |
| 7 | 2 | 62 | 95 | 31 | 92 | 17 | 47 | 15 | 17 | 10 | 27 | 0 | 0 | 138 | 11 | 4 | 17 | 3 | 10 | 2 | 21 | 1 | | | 8 | 76 | 1 | 50 | 1 | | | 0 | 0 |
| 7 | 16 | 62 | 82 | 43 | 47 | 32 | 92 | 12 | 95 | 11 | 2 | 0 | 0 | 909 | 11 | 7 | 17 | 6 | 10 | 3 | 21 | 3 | 5 | 1 | 16 | 50 | 1 | 76 | 1 | 77 | 1 | 0 | 0 |
| 8 | 6 | 62 | 95 | 36 | 47 | 29 | 82 | 21 | 89 | 6 | 8 | 0 | 0 | 604 | 17 | 6 | 11 | 6 | 10 | 4 | 2 | 1 | | | 60 | 50 | 4 | 76 | 3 | 51 | 3 | 0 | 2 |
| 8 | 20 | 62 | 95 | 74 | 47 | 17 | 92 | 2 | 35 | 2 | 5 | 0 | 0 | 365 | 11 | 6 | 17 | 5 | 10 | 4 | 21 | 3 | 46 | 2 | 152 | 50 | 5 | 51 | 5 | 76 | 3 | 0 | 0 |
| 9 | 4 | 62 | 95 | 66 | 47 | 17 | 25 | 5 | 35 | 3 | 9 | 0 | 0 | 141 | 11 | 5 | 17 | 3 | 10 | 2 | | | | | 129 | 50 | 5 | 51 | 3 | 77 | 3 | 3 | 0 |
| 9 | 17 | 62 | 95 | 76 | 25 | 6 | 47 | 6 | 35 | 2 | 10 | 0 | 0 | 162 | 11 | 5 | 17 | 4 | 22 | 1 | 10 | 1 | 21 | 1 | 75 | 50 | 4 | 54 | 3 | 77 | 3 | 0 | 0 |

***RESULTS IN MICROGRAMS PER LITER***
***(Parts per billion)***

**STATION LOCATION** LAKE MICHIGAN AT
MILWAUKEE, WISCONSIN 65

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 11 | 13 | 61 | 11 | 24 | 5788 | 103 | 24 | 79 | 2 | 7 | 6 | 0 | 0 | 5 | 1 | 2 | 1 | 0 | 6 |
| 12 | 20 | 61 | 1 | 2 | 5490 | 92 | 19 | 73 | 1 | 6 | 5 | 0 | 0 | 5 | 0 | 2 | 1 | 1 | 3 |
| 1 | 23 | 62 | 2 | 5 | 5190 | 121 | 21 | 100 | 1 | 8 | 5 | 1 | 0 | 4 | 0 | 1 | 1 | 0 | 5 |
| 2 | 16 | 62 | 3 | 6 | 5199 | 125 | 23 | 102 | 4 | 6 | 4 | 1 | 1 | 2 | 0 | 2 | 2 | 0 | 5 |
| 3 | 28 | 62 | 4 | 17 | 4940 | 152 | 42 | 110 | 4 | 11 | 10 | 1 | 1 | 8 | 0 | 5 | 4 | 0 | 8 |
| 4 | 27 | 62 | 5 | 24 | 5044 | 136 | 49 | 87 | 3 | 18 | 10 | 1 | 1 | 8 | 0 | 4 | 5 | 0 | 9 |
| 6 | 15 | 62 | 7 | 6 | 5300 | 120 | 31 | 89 | 1 | 10 | 8 | 2 | 1 | 5 | 0 | 2 | 2 | 1 | 7 |
| 7 | 26 | 62 | 8 | 9 | 5007 | 146 | 39 | 107 | 1 | 15 | 11 | 1 | 1 | 8 | 1 | 3 | 3 | 1 | 5 |
| 8 | 29 | 62 | 9 | 13 | 5277 | 126 | 31 | 95 | 1 | 10 | 9 | 1 | 0 | 7 | 1 | 3 | 3 | 0 | 5 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 11.1 | 10.1 | 8.3 | 1.1 | 9 | .7 | 1.4 | .0 | 5 | 104 | 130 | 0 | 1 | 16 | .0 | 153 | 190 |
| 10 | 9 | 61 | 5.5 | 11.1 | 8.0 | 3.5 | 11 | .4 | 1.5 | .0 | 6 | 106 | 131 | 0 | 1 | 16 | .0 | 153 | 25 |
| 10 | 16 | 61 | 8.1 | 10.8 | 8.1 | 1.3 | 10 | .6 | 1.4 | .0 | 6 | 106 | 129 | 0 | 1 | 19 | .0 | 151 | 19 |
| 10 | 23 | 61 | 9.0 | 11.0 | 8.2 | 2.4 | 8 | .5 | 1.4 | .0 | 7 | 104 | 131 | 0 | 4 | 18 | .0 | 143 | 13 |
| 10 | 30 | 61 | 9.4 | 10.7 | 8.3 | 1.8 | 8 | 1.1 | 2.3 | .1 | 7 | 107 | 131 | 0 | 2 | 16 | .0 | 153 | 360 |
| 11 | 6 | 61 | 8.4 | 11.4 | 8.6 | 1.3 | 8 | .5 | .8 | .0 | 7 | 105 | 131 | 0 | 1 | 19 | .0 | 142 | 8 |
| 11 | 13 | 61 | 7.4 | 11.5 | 8.5 | 1.4 | 8 | .7 | 1.8 | .1 | 7 | 108 | 132 | 0 | 1 | 18 | .0 | 157 | 530 |
| 11 | 20 | 61 | 6.7 | 11.5 | 8.4 | .8 | 9 | .7 | 1.2 | .1 | 6 | 106 | 128 | 0 | 1 | 18 | .0 | 148 | 6 |
| 11 | 27 | 61 | 6.6 | 12.1 | 8.2 | 1.5 | 7 | .7 | 1.6 | .0 | 6 | 105 | 130 | 0 | 6 | 19 | .0 | 148 | 130 |
| 12 | 4 | 61 | 7.2 | 11.9 | 8.1 | 1.1 | 7 | .7 | 1.0 | .0 | 6 | 105 | 130 | 0 | 2 | 19 | .0 | 143 | 8 |
| 12 | 11 | 61 | 4.8 | 12.2 | 8.2 | .8 | 8 | .6 | 1.4 | .0 | 7 | 106 | 130 | 0 | 1 | 18 | .0 | 154 | *11 |
| 12 | 18 | 61 | 2.7 | 12.6 | 8.3 | 1.1 | 8 | .5 | 1.0 | .0 | 7 | 107 | 132 | 0 | 1 | 19 | .0 | 146 | 13 |
| 1 | 2 | 62 | 1.4 | 13.3 | 8.2 | .5 | 8 | 1.0 | 1.8 | .0 | 9 | 107 | 132 | 0 | 0 | 19 | .0 | 157 | 130 |
| 1 | 8 | 62 | 1.5 | 13.3 | 8.1 | 1.0 | 11 | .3 | 1.1 | .0 | 5 | 108 | 132 | 0 | 2 | 20 | .0 | 145 | 7 |
| 1 | 15 | 62 | .3 | 13.6 | 8.2 | 1.0 | 8 | .7 | 1.3 | .0 | 6 | 106 | 131 | 0 | 4 | 18 | .0 | 150 | 5 |
| 1 | 22 | 62 | .2 | 13.5 | 8.2 | .8 | 9 | .5 | 1.1 | .0 | 5 | 107 | 130 | 0 | 0 | 20 | .0 | 149 | *1 |
| 1 | 29 | 62 | .5 | 13.7 | 8.1 | 1.1 | 8 | .6 | 1.5 | .0 | 7 | 107 | 130 | 0 | 0 | 18 | .0 | 154 | 3 |
| 2 | 5 | 62 | .5 | 13.9 | 8.2 | 1.4 | 8 | .5 | 1.2 | .0 | 6 | 107 | 131 | 0 | 1 | 18 | .0 | 145 | *1 |
| 2 | 13 | 62 | .4 | 14.0 | 8.3 | 2.3 | 9 | 1.0 | 2.6 | .0 | 10 | 108 | 136 | 0 | 1 | 18 | .0 | 155 | - |
| 2 | 19 | 62 | .3 | 13.6 | 8.2 | 1.1 | 9 | 1.3 | 2.5 | .1 | 9 | 110 | 133 | 0 | 3 | 22 | .0 | 152 | 1100 |
| 2 | 26 | 62 | .3 | 13.8 | 8.1 | .9 | 8 | .7 | 1.6 | .0 | 8 | 109 | 132 | 0 | 2 | 19 | .0 | 152 | 2200 |
| 3 | 5 | 62 | .4 | 13.8 | 8.1 | 1.0 | 7 | .4 | 1.3 | .0 | 6 | 110 | 133 | 0 | 1 | 21 | .0 | 154 | 3 |
| 3 | 12 | 62 | .4 | 13.7 | 8.1 | 1.0 | 7 | .6 | 1.2 | .1 | 7 | 111 | 133 | 0 | 1 | 20 | .0 | 144 | 44 |
| 3 | 19 | 62 | .8 | 13.6 | 8.2 | 1.1 | 6 | .7 | 1.3 | .1 | 7 | 110 | 133 | 0 | 1 | 19 | .0 | 152 | *100 |
| 3 | 26 | 62 | 1.2 | 13.7 | 8.1 | .9 | 8 | .6 | 1.2 | .1 | 7 | 110 | 133 | 0 | 2 | 19 | .0 | 151 | *1 |
| 4 | 2 | 62 | 1.7 | 13.2 | 8.0 | 1.1 | 6 | .6 | 1.9 | .0 | 7 | 110 | 131 | 0 | 1 | 18 | .0 | 153 | 8 |
| 4 | 9 | 62 | 3.1 | 12.6 | 8.2 | 1.1 | 10 | 1.8 | 2.6 | .0 | 9 | 112 | 140 | 5 | 2 | 20 | .0 | 170 | 380 |
| 4 | 16 | 62 | 2.7 | 12.6 | 8.1 | 1.4 | 9 | 1.1 | 1.6 | .1 | 7 | 106 | 128 | 0 | 5 | 19 | .0 | 141 | *1 |
| 4 | 23 | 62 | 4.9 | 12.5 | 8.1 | 2.0 | 9 | 1.5 | 2.5 | .1 | 8 | 114 | 137 | 0 | 3 | 22 | .0 | 162 | 92 |
| 4 | 30 | 62 | 4.9 | 13.4 | 8.1 | 1.4 | 9 | .4 | 1.3 | .0 | 7 | 107 | 130 | 0 | 1 | 19 | .0 | 160 | 8 |
| 5 | 7 | 62 | 5.4 | 13.2 | 8.2 | 1.5 | 10 | .6 | 1.4 | .1 | 6 | 116 | 127 | 0 | 1 | 19 | .0 | 147 | 50 |
| 5 | 14 | 62 | 5.4 | 12.5 | 8.3 | 1.4 | 10 | .6 | 1.7 | .0 | 7 | 108 | 129 | 0 | 1 | 17 | .0 | 151 | 23 |
| 5 | 21 | 62 | 7.7 | 13.4 | 8.3 | 1.7 | 8 | .5 | 2.1 | .1 | 7 | 108 | 131 | 0 | 1 | 15 | .0 | 169 | 18 |
| 5 | 28 | 62 | 7.6 | 13.2 | 8.4 | 2.3 | 9 | .6 | 2.0 | .1 | 7 | 108 | 130 | 0 | 1 | 19 | .0 | 161 | 3 |
| 6 | 4 | 62 | 8.3 | 13.2 | 8.5 | 1.6 | 11 | .9 | 2.1 | .0 | 6 | 107 | 131 | 0 | 1 | 23 | .0 | 164 | 10 |
| 6 | 11 | 62 | 8.2 | 12.7 | 8.3 | .9 | 8 | .8 | 1.7 | .0 | 8 | 105 | 128 | 0 | 1 | 18 | .0 | 153 | 15 |
| 6 | 18 | 62 | 8.7 | 12.0 | 8.3 | 1.5 | 10 | .9 | 1.9 | .0 | 7 | 107 | 129 | 0 | 1 | 18 | .0 | 145 | 33 |
| 6 | 25 | 62 | 7.4 | 11.8 | 8.2 | .8 | 7 | .7 | 1.4 | .0 | 8 | 106 | 130 | 0 | 0 | 18 | .0 | 150 | 3 |
| 7 | 2 | 62 | 11.4 | 11.6 | 8.2 | 1.1 | 9 | .6 | 1.5 | .0 | 8 | 110 | 129 | 0 | 1 | 18 | .0 | 157 | 3 |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** WISCONSIN
**MAJOR BASIN** WESTERN GREAT LAKES
**MINOR BASIN** LAKE MICHIGAN-WESTERN SHORE
**STATION LOCATION** LAKE MICHIGAN AT
MILWAUKEE, WISCONSIN 65

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 9 | 62 | 11.6 | 10.3 | 8.3 | 1.0 | 10 | .7 | 1.3 | .1 | 8 | 108 | 128 | 0 | 1 | 19 | .0 | 145 | 7 |
| 7 | 16 | 62 | 16.5 | 10.3 | 8.4 | 1.0 | 10 | .6 | 1.8 | .1 | 8 | 105 | 128 | 0 | 1 | 19 | .0 | 157 | *10 |
| 7 | 23 | 62 | 7.6 | 11.0 | 7.9 | 1.5 | 11 | .8 | 1.5 | .0 | 9 | 105 | 131 | 0 | 0 | 19 | .0 | 146 | 100 |
| 7 | 30 | 62 | 12.3 | 10.6 | 8.3 | 1.1 | 11 | .6 | 1.5 | .0 | 7 | 104 | 130 | 0 | 1 | 18 | .0 | 146 | 30 |
| 8 | 6 | 62 | 6.8 | 11.0 | 7.9 | 1.7 | 8 | .8 | 1.3 | .0 | 7 | 106 | 130 | 0 | 1 | 20 | .0 | 153 | 10 |
| 8 | 13 | 62 | 18.4 | 9.5 | 8.3 | 1.8 | 11 | .8 | 1.9 | .0 | 7 | 106 | 126 | 0 | 1 | 20 | .0 | 150 | 10 |
| 8 | 20 | 62 | 10.6 | 10.1 | 8.0 | 1.0 | 8 | .3 | 1.6 | .1 | 9 | 108 | 129 | 0 | 2 | 23 | .0 | 160 | 1100 |
| 8 | 27 | 62 | 12.5 | 10.2 | 8.1 | 1.8 | 11 | .9 | 1.7 | .1 | 7 | 108 | 128 | 0 | 0 | 18 | .0 | 156 | 100 |
| 9 | 10 | 62 | 6.4 | 11.0 | 7.9 | 1.9 | 6 | .7 | 1.7 | .1 | 9 | 107 | 131 | 0 | 1 | 19 | .0 | 159 | 60 |
| 9 | 17 | 62 | 8.3 | 11.1 | 8.0 | 1.4 | 9 | .7 | .9 | .0 | 7 | 107 | 131 | 0 | 1 | 20 | .0 | 144 | 110 |
| 9 | 24 | 62 | 8.0 | 10.8 | 7.9 | 1.3 | 9 | .8 | 2.0 | .1 | 7 | 108 | 128 | 0 | 6 | 20 | .0 | 160 | 1200 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Supplied by U.S. Army Corps of Engineer
U.S. Lake Survey

MAJOR BASIN Western Great Lakes
MINOR BASIN Lake Michigan-Western Shore
STATION LOCATION Lake Michigan at
Milwaukee, Wisconsin

| October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|

FLOW DATA NOT APPLICABLE --- LAKE LEVELS ONLY

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** MICHIGAN

**MAJOR BASIN** WESTERN GREAT LAKES

**MINOR BASIN** LAKE SUPERIOR

**STATION LOCATION** ST. MARYS RIVER AT
SAULT STE. MARIE, MICHIGAN 66

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 13 | - | - | - | - | - | - | 0 | 5 | 7 | 5 | 7 | 7 | | | | | | |
| 10 | 9 | 61 | 10 | 31 | - | - | - | - | - | - | 0 | 5 | 4 | 5 | 4 | 7 | | | | | | |
| 10 | 16 | 61 | 10 | 30 | - | - | - | - | - | - | 0 | 5 | 0 | 5 | 0 | 7 | | | | | | |
| 10 | 23 | 61 | 11 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 4 | 2 | 4 | 4 | 6 | | | | | | |
| 10 | 30 | 61 | 11 | 13 | - | - | - | - | - | - | 4 | 4 | 7 | 4 | 11 | 6 | | | | | | |
| 11 | 6 | 61 | 11 | 22 | - | - | - | - | - | - | 4 | 4 | 3 | 4 | 7 | 6 | | | | | | |
| 11 | 13 | 61 | 11 | 28 | - | - | - | - | - | - | 6 | 5 | 8 | 5 | 14 | 7 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 6 | 8 | 6 | 10 | 8 | | | | | | |
| 11 | 26 | 61 | 12 | 8 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 5 | 6 | 5 | 10 | 7 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | - | - | - | - | - | - | 4 | 5 | 12 | 5 | 16 | 7 | | | | | | |
| 12 | 11 | 61 | 12 | 21 | - | - | - | - | - | - | 4 | 5 | 3 | 5 | 7 | 7 | | | | | | |
| 12 | 18 | 61 | 1 | 2 | - | - | - | - | - | - | 3 | 6 | 1 | 5 | 4 | 8 | | | | | | |
| 12 | 25 | 61 | 1 | 8 | 0 | 0 | 1 | 1 | 1 | 1 | 5 | 4 | 5 | 4 | 10 | 6 | | | | | | |
| 1 | 8 | 62 | 1 | 24 | - | - | - | - | - | - | 3 | 5 | 7 | 5 | 10 | 7 | | | | | | |
| 1 | 15 | 62 | 1 | 25 | - | - | - | - | - | - | 1 | 5 | 4 | 5 | 5 | 7 | | | | | | |
| 1 | 22 | 62 | 2 | 8 | - | - | - | - | - | - | 8 | 6 | 6 | 6 | 14 | 8 | | | | | | |
| 1 | 29 | 62 | 2 | 8 | 1 | 1 | 0 | 1 | 1 | 1 | 4 | 4 | 7 | 4 | 11 | 6 | | | | | | |
| 2 | 5 | 62 | 2 | 15 | - | - | - | - | - | - | 7 | 4 | 7 | 4 | 14 | 6 | | | | | | |
| 2 | 12 | 62 | 2 | 27 | - | - | - | - | - | - | 2 | 5 | 2 | 6 | 4 | 8 | | | | | | |
| 2 | 19 | 62 | 3 | 5 | - | - | - | - | - | - | 5 | 4 | 6 | 4 | 11 | 6 | | | | | | |
| 2 | 26 | 62 | 3 | 13 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 4 | 6 | 4 | 12 | 5 | | | | | | |
| 3 | 5 | 62 | 3 | 19 | - | - | - | - | - | - | 0 | 5 | 6 | 5 | 6 | 7 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | - | - | - | - | - | - | 0 | 4 | 1 | 4 | 1 | 6 | | | | | | |
| 3 | 19 | 62 | 4 | 3 | - | - | - | - | - | - | 3 | 6 | 5 | 5 | 8 | 7 | | | | | | |
| 3 | 26 | 62 | 4 | 9 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 4 | 8 | 4 | 9 | 5 | | | | | | |
| 4 | 2 | 62 | 4 | 16 | - | - | - | - | - | - | 5 | 4 | 5 | 4 | 10 | 6 | | | | | | |
| 4 | 9 | 62 | 6 | 13 | - | - | - | - | - | - | 8 | 4 | 5 | 5 | 13 | 6 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 0 | 7 | 1 | 6 | 1 | 9 | | | | | | |
| 4 | 23 | 62 | 5 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 22 | 6 | 28 | 7 | | | | | | |
| 4 | 30 | 62 | 6 | 4 | - | - | - | - | - | - | 2 | 7 | 6 | 7 | 8 | 10 | | | | | | |
| 5 | 7 | 62 | 6 | 18 | - | - | - | - | - | - | 5 | 7 | 1 | 7 | 6 | 10 | | | | | | |
| 5 | 14 | 62 | 6 | 21 | - | - | - | - | - | - | 7 | 7 | 7 | 8 | 14 | 11 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | - | - | - | - | - | - | 8 | 5 | 13 | 6 | 21 | 8 | | | | | | |
| 5 | 28 | 62 | 7 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 5 | 3 | 5 | 4 | 7 | | | | | | |
| 6 | 4 | 62 | 7 | 6 | - | - | - | - | - | - | 1 | 5 | 7 | 7 | 8 | 9 | | | | | | |
| 6 | 11 | 62 | 7 | 12 | - | - | - | - | - | - | 1 | 5 | 9 | 6 | 10 | 8 | | | | | | |
| 6 | 18 | 62 | 7 | 17 | - | - | - | - | - | - | 5 | 6 | 17 | 8 | 22 | 10 | | | | | | |
| 6 | 25 | 62 | 9 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 1 | 5 | 2 | 7 | | | | | | |
| 7 | 2 | 62 | 8 | 8 | - | - | - | - | - | - | 5 | 5 | 7 | 6 | 12 | 7 | | | | | | |
| 7 | 9 | 62 | 8 | 7 | - | - | - | - | - | - | 2 | 5 | 9 | 6 | 11 | 7 | | | | | | |
| 7 | 16 | 62 | 8 | 8 | - | - | - | - | - | - | 3 | 5 | 9 | 6 | 12 | 7 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 7 | 23 | 62 | 8 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 9 | 6 | 12 | 7 | | | | | | |
| 7 | 30 | 62 | 8 | 21 | - | - | - | - | - | - | 1 | 5 | 10 | 5 | 11 | 7 | | | | | | |
| 8 | 6 | 62 | 8 | 28 | - | - | - | - | - | - | 4 | 5 | 7 | 6 | 11 | 7 | | | | | | |
| 8 | 13 | 62 | 8 | 24 | - | - | - | - | - | - | 11 | 6 | 6 | 6 | 17 | 8 | | | | | | |
| 8 | 20 | 62 | 9 | 9 | - | - | - | - | - | - | 2 | 3 | 12 | 4 | 14 | 5 | | | | | | |
| 8 | 27 | 62 | 9 | 12 | - | - | - | - | - | - | 0 | 8 | 10 | 7 | 10 | 11 | | | | | | |
| 9 | 3 | 62 | 10 | 3 | - | - | - | - | - | - | 2 | 5 | 9 | 6 | 11 | 8 | | | | | | |
| 9 | 10 | 62 | 10 | 8 | - | - | - | - | - | - | 4 | 6 | 7 | 6 | 11 | 8 | | | | | | |
| 9 | 17 | 62 | 10 | 15 | - | - | - | - | - | - | 6 | 5 | 16 | 6 | 22 | 7 | | | | | | |
| 9 | 24 | 62 | 10 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 6 | 3 | 7 | 4 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** MICHIGAN

**MAJOR BASIN** WESTERN GREAT LAKES

**MINOR BASIN** LAKE SUPERIOR

**STATION LOCATION** ST. MARYS RIVER AT
SAULT STE. MARIE, MICHIGAN

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Co* | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | |
| MONTH | DAY | YEAR | TOTAL | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 100 | 0 | 0 | 20 | 0 | 20 | 0 | 0 | 60 | 20 | 190 | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 150 | 0 | 210 | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 200 | 20 | 0 | 40 | 0 | 0 | 0 | 40 | 100 | 40 | 60 | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 230 | 0 | 80 | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 500 | 70 | 0 | 90 | 0 | 20 | 20 | 110 | 180 | 70 | 90 | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 0 | 60 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 400 | 0 | 0 | 110 | 0 | 50 | 0 | 50 | 230 | 0 | 90 | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 300 | 0 | 20 | 80 | 0 | 0 | 0 | 60 | 100 | 60 | 60 | | | | | | | | | | | | | | | | | | |
| 2 | 12 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 80 | 0 | 60 | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 110 | 0 | 20 | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 00 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 70 | 0 | 70 | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 100 | 0 | 0 | 40 | 0 | 0 | 0 | 20 | 40 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 100 | 0 | 0 | 20 | 0 | 0 | 0 | 70 | 50 | 0 | 20 | | | | | | | | | | | | | | | | | | |
| 5 | 8 | 62 | 300 | 0 | 20 | 40 | 0 | 20 | 0 | 60 | 170 | 0 | 0 | | | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 100 | 0 | 0 | 60 | 0 | 0 | 0 | 0 | 80 | 0 | 110 | | | | | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 100 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 40 | 20 | 130 | | | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 500 | 0 | 0 | 20 | 0 | 100 | 0 | 120 | 290 | 40 | 40 | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 400 | 0 | 0 | 110 | 0 | 0 | 0 | 80 | 210 | 170 | 300 | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 600 | 0 | 0 | 40 | 0 | 0 | 0 | 230 | 340 | 110 | 520 | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 1100 | 0 | 0 | 0 | 0 | 40 | 20 | 120 | 870 | 0 | 40 | 33 | 2 | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 400 | 0 | 0 | 40 | 0 | 0 | 0 | 80 | 250 | 40 | 40 | | | | | | | | | | | | | | | | | | |
| 9 | 3 | 62 | 1400 | 0 | 0 | 40 | 0 | 0 | 0 | 370 | 990 | 40 | 0 | | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 900 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 830 | 40 | 210 | 92 | 1 | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 95 | 20 | 47 | 18 | 2 | 9 | 24 | 7 | 46 | 20 | 0 | 18 | 17 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 47 | 61 | 95 | 10 | 8 | 5 | 6 | 2 | 22 | 0 | 0 | 10 | 17 | 1 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 47 | 63 | 95 | 9 | 9 | 7 | 24 | 6 | 15 | 0 | 0 | 4 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 47 | 23 | 95 | 21 | 24 | 5 | 2 | 4 | 47 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 95 | 21 | 47 | 17 | 2 | 7 | 81 | 5 | 50 | 90 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 47 | 28 | 95 | 15 | 2 | 9 | 25 | 4 | 44 | 0 | 10 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 95 | 27 | 47 | 12 | 60 | 8 | 89 | 8 | 45 | 0 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 1 |
| 1 | 15 | 62 | 95 | 22 | 60 | 10 | 47 | 9 | 89 | 8 | 51 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 12 | 62 | 95 | 14 | 60 | 8 | 9 | 8 | 89 | 6 | 64 | 0 | 0 | 3 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 26 | 15 | 95 | 15 | 60 | 10 | 92 | 9 | 51 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 60 | 30 | 95 | 14 | 77 | 12 | 9 | 10 | 34 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 95 | 13 | 9 | 12 | 60 | 11 | 77 | 10 | 54 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 95 | 24 | 60 | 16 | 47 | 13 | 9 | 11 | 36 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 60 | 38 | 95 | 20 | 9 | 7 | 92 | 6 | 29 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 8 | 62 | 60 | 21 | 95 | 21 | 92 | 14 | 89 | 11 | 33 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 60 | 45 | 95 | 17 | 92 | 9 | 47 | 5 | 24 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 60 | 22 | 95 | 19 | 91 | 7 | 25 | 4 | 48 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 95 | 12 | 91 | 10 | 9 | 7 | 25 | 7 | 64 | 0 | 0 | 11 | | | | | | | | | | | 4 | 50 | 1 | | | | | 0 | 0 |
| 7 | 2 | 62 | 95 | 28 | 24 | 11 | 9 | 8 | 92 | 5 | 48 | 0 | 0 | 225 | 17 | 5 | 11 | 4 | 3 | 4 | 5 | 2 | 21 | 1 | 36 | 50 | 3 | 51 | 2 | 76 | 2 | 0 | 1 |
| 7 | 16 | 62 | 95 | 18 | 30 | 13 | 25 | 10 | 24 | 8 | 51 | 0 | 0 | 12 | 11 | 1 | | | | | | | | | 2 | | | | | | | 1 | 0 |
| 8 | 6 | 62 | 95 | 25 | 24 | 15 | 25 | 7 | 33 | 6 | 47 | 0 | 0 | 10 | | | | | | | | | | | 8 | 51 | 1 | 52 | 1 | | | 2 | 0 |
| 8 | 20 | 62 | 95 | 21 | 25 | 18 | 2 | 12 | 24 | 8 | 41 | 0 | 0 | 54 | 11 | 3 | 17 | 2 | 10 | 1 | | | | | 9 | 51 | 2 | | | | | 0 | 0 |
| 9 | 3 | 62 | 95 | 37 | 24 | 16 | 25 | 5 | 47 | 4 | 38 | 0 | 0 | 7 | 11 | 1 | | | | | | | | | 16 | 51 | 3 | | | | | 0 | 0 |
| 9 | 17 | 62 | 24 | 22 | 95 | 17 | 92 | 12 | 25 | 11 | 38 | 0 | 0 | 28 | 11 | 1 | 17 | 1 | 10 | 1 | | | | | 3 | 77 | 1 | | | | | 0 | 1 |

**MINOR BASIN** LAKE SUPERIOR

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATION LOCATION** ST. MARYS RIVER AT

SAULT STE. MARIE, MICHIGAN 66

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 10 | 61 | 10 | 20 | 3440 | 135 | 16 | 119 | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 7 | 61 | 11 | 21 | 4710 | 100 | 20 | 80 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 11 | 61 | 12 | 23 | 3855 | 88 | 13 | 75 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 11 | 61 | | * | 12005 | 106 | 17 | 89 | 2 | 6 | 3 | 1 | 0 | 2 | 0 | 1 | 1 | 0 | 4 |
| 1 | 16 | 62 | 1 | 30 | 4579 | 92 | 16 | 76 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 5 | 62 | 3 | 19 | 4729 | 123 | 27 | 96 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 5 | 62 | | * | 9308 | 107 | 21 | 86 | 1 | 8 | 4 | 1 | 0 | 3 | 0 | 2 | 2 | 0 | 4 |
| 4 | 10 | 62 | 4 | 23 | 2550 | 34 | 5 | 29 | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 10 | 62 | 5 | 23 | 3686 | 103 | 26 | 77 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 13 | 62 | 6 | 26 | 3683 | 113 | 29 | 84 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 13 | 62 | | * | 9919 | 90 | 22 | 68 | 1 | 8 | 5 | 2 | 0 | 3 | 0 | 2 | 2 | 0 | 4 |
| 7 | 14 | 62 | 7 | 27 | 4084 | 75 | 13 | 62 | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 13 | 62 | 8 | 24 | 3923 | 104 | 23 | 81 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 7 | 62 | 9 | 19 | 3637 | 122 | 18 | 104 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 7 | 62 | | * | 11644 | 99 | 18 | 81 | 2 | 6 | 3 | 1 | 0 | 2 | 0 | 1 | 1 | 0 | 5 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 12.8 | 9.5 | 7.8 | – | 6 | .5 | .9 | .0 | 2 | 40 | 45 | 0 | 0 | – | .5 | – | 55 |
| 10 | 9 | 61 | 13.6 | 10.0 | 7.8 | – | 6 | .5 | 1.0 | .0 | 2 | 43 | 45 | 0 | 0 | – | .1 | – | 10 |
| 10 | 16 | 61 | 10.9 | 10.9 | 7.8 | – | 7 | .4 | .8 | .0 | 2 | 42 | 45 | 0 | 0 | 0 | .1 | – | 8 |
| 10 | 23 | 61 | 10.5 | 10.7 | 7.8 | – | 6 | .4 | .8 | .0 | 2 | 42 | 45 | 0 | 0 | – | .1 | – | 8 |
| 10 | 30 | 61 | 10.0 | 10.6 | 7.8 | – | 8 | .3 | .8 | .0 | 2 | 42 | 45 | 0 | 0 | – | .1 | – | 6 |
| 11 | 6 | 61 | 8.6 | 11.0 | 7.8 | – | 7 | .3 | .8 | .0 | 2 | 42 | 45 | 0 | 0 | 3 | .0 | – | 5 |
| 11 | 13 | 61 | 7.5 | 12.5 | 7.8 | – | 7 | .3 | .8 | .1 | 2 | 45 | 45 | 0 | 0 | 5 | .0 | 32 | 9 |
| 11 | 20 | 61 | 6.4 | 12.3 | 7.8 | – | 7 | .3 | .9 | .1 | 2 | 41 | 44 | 0 | 0 | – | .0 | – | 8 |
| 11 | 27 | 61 | 5.7 | 12.5 | 7.8 | – | 6 | .3 | .8 | .1 | 2 | 42 | 45 | 0 | 0 | 3 | .0 | 47 | 7 |
| 12 | 4 | 61 | 5.9 | 12.5 | 7.8 | – | 6 | .3 | .7 | .1 | 2 | 41 | 46 | 0 | 0 | – | .0 | 72 | 3 |
| 12 | 11 | 61 | 2.8 | 12.8 | 7.7 | – | 6 | .2 | .6 | .1 | 2 | 42 | 44 | 5 | 0 | 3 | .0 | 62 | 10 |
| 12 | 18 | 61 | 2.3 | 12.5 | 7.8 | – | 5 | .2 | .7 | .1 | 2 | 41 | 45 | 0 | 0 | 4 | .0 | 62 | 2 |
| 12 | 25 | 61 | 1.5 | 13.1 | 7.7 | – | 6 | .2 | .6 | .1 | 2 | 42 | 45 | 0 | 0 | – | .0 | – | 10 |
| 1 | 2 | 62 | .2 | 13.3 | 7.6 | – | 6 | .2 | .4 | .1 | 2 | 41 | 45 | 0 | 0 | – | .0 | – | 2 |
| 1 | 8 | 62 | .4 | 13.5 | 7.7 | – | 5 | .2 | .5 | .1 | 2 | 42 | 45 | 0 | 0 | – | .0 | – | *1 |
| 1 | 15 | 62 | .1 | 13.8 | 7.7 | – | 6 | .2 | .5 | .1 | 2 | 42 | 45 | 0 | 0 | 7 | .0 | 74 | 1 |
| 1 | 22 | 62 | .1 | 13.5 | 7.6 | – | 6 | .2 | .5 | .1 | 2 | 43 | 45 | 0 | 0 | 5 | .0 | 49 | *1 |
| 1 | 29 | 62 | .0 | 13.6 | 7.7 | – | 6 | .2 | .5 | .1 | 2 | 42 | 45 | 0 | 0 | 7 | .0 | 51 | 1 |
| 2 | 5 | 62 | .0 | 13.6 | 7.7 | – | 6 | .2 | .5 | .1 | 2 | 42 | 45 | 0 | 0 | 8 | .0 | 35 | 1 |
| 2 | 12 | 62 | .0 | 14.0 | 7.7 | – | 5 | .2 | .5 | .1 | 2 | 42 | 45 | 0 | 0 | 15 | .0 | – | *1 |
| 2 | 19 | 62 | .0 | 13.8 | 7.7 | – | 6 | .2 | .6 | .1 | 2 | 42 | 46 | 0 | 0 | 7 | .0 | 14 | 3 |
| 2 | 26 | 62 | .1 | 13.3 | 7.6 | – | 5 | .2 | .7 | .1 | 2 | 42 | 46 | 0 | 0 | – | .0 | – | 1 |
| 3 | 5 | 62 | .2 | 12.7 | 7.7 | – | 5 | .2 | .6 | .1 | 2 | 42 | 46 | 0 | 0 | – | .0 | – | *1 |
| 3 | 12 | 62 | .3 | 12.8 | 7.7 | – | 6 | .3 | .7 | .1 | 2 | 43 | 47 | 0 | 0 | – | .0 | – | 2 |
| 3 | 19 | 62 | .3 | 12.8 | 7.6 | – | 5 | .3 | .8 | .1 | 2 | 43 | 46 | 0 | 0 | – | .0 | – | 2 |
| 3 | 26 | 62 | .3 | 12.8 | 7.7 | – | 6 | .3 | .8 | .1 | 1 | 42 | 46 | 0 | 0 | – | .0 | – | 1 |
| 4 | 2 | 62 | .4 | 11.9 | 7.7 | – | 5 | .4 | .9 | .1 | 1 | 42 | 46 | 0 | 0 | – | .0 | – | – |
| 4 | 9 | 62 | .5 | 11.8 | 7.7 | – | 6 | .6 | 2.0 | .1 | 1 | 42 | 45 | 0 | 0 | – | .0 | – | – |
| 4 | 16 | 62 | .4 | 11.8 | 7.8 | – | 5 | .4 | .9 | .1 | 1 | 41 | 45 | 0 | 0 | 7 | .0 | 62 | *1 |
| 4 | 23 | 62 | .5 | 11.7 | 7.8 | – | 5 | .6 | 1.6 | .1 | 1 | 41 | 45 | 0 | – | 5 | .0 | 60 | 1 |
| 4 | 30 | 62 | 2.0 | 11.6 | 7.8 | – | 6 | .6 | 1.4 | .1 | 1 | 43 | 45 | 0 | – | 6 | .0 | 62 | 7 |
| 5 | 7 | 62 | 1.5 | 11.6 | 7.8 | – | 6 | .3 | .7 | .1 | 1 | 43 | 45 | 0 | – | 8 | .0 | 67 | 13 |
| 5 | 14 | 62 | 2.8 | 13.3 | 7.7 | – | 7 | .4 | 1.0 | .1 | 1 | 41 | 45 | 1 | – | – | .0 | – | 32 |
| 5 | 21 | 62 | 5.7 | 12.4 | 7.8 | – | 7 | .5 | 1.2 | .1 | 1 | 41 | 45 | 3 | – | 3 | .0 | – | *3 |
| 5 | 28 | 62 | 6.1 | 12.0 | 7.8 | – | 6 | .5 | 1.1 | .1 | 1 | 40 | 45 | 5 | – | – | .0 | – | 7 |
| 6 | 4 | 62 | 8.1 | 11.0 | 8.0 | – | 5 | .4 | .9 | .1 | 2 | 41 | 45 | 3 | – | 7 | .0 | – | 4 |
| 6 | 11 | 62 | 7.4 | 11.3 | 7.9 | – | 6 | .3 | .8 | .1 | 1 | 41 | 44 | 3 | – | 3 | .0 | – | 13 |
| 6 | 13 | 62 | 10.5 | 11.0 | 7.9 | – | 7 | .4 | 1.1 | .1 | 2 | 41 | 45 | 3 | – | – | .0 | – | – |
| 6 | 18 | 62 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | 3 |

**MINOR BASIN** LAKE SUPERIOR

**STATION LOCATION** ST. MARYS RIVER AT

SAULT STE. MARIE, MICHIGAN 66

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 25 | 62 | 10.7 | 11.0 | 8.0 | - | 6 | .3 | 1.0 | .1 | 2 | 42 | 45 | 3 | - | - | .0 | - | 1 |
| 7 | 2 | 62 | 14.6 | 10.0 | 8.0 | - | 6 | .4 | 1.2 | .1 | 2 | 42 | 45 | 0 | - | 7 | .0 | 62 | 13 |
| 7 | 9 | 62 | 13.9 | 9.5 | 8.1 | - | 6 | .4 | 1.2 | .1 | 2 | 40 | 45 | 0 | - | - | .0 | - | 18 |
| 7 | 16 | 62 | 15.5 | 9.0 | 8.1 | - | 6 | .3 | .8 | .1 | 2 | 40 | 45 | 0 | - | - | .0 | - | 33 |
| 7 | 23 | 62 | 15.9 | 9.8 | 8.0 | - | 5 | .3 | 1.1 | .1 | 2 | 42 | 45 | 0 | - | 7 | .0 | 40 | 18 |
| 7 | 30 | 62 | 16.3 | 9.8 | 8.0 | - | 5 | .3 | 1.0 | .1 | 2 | 41 | 46 | 0 | - | 4 | .0 | 48 | - |
| 8 | 6 | 62 | 17.3 | 9.6 | 7.9 | - | 6 | .3 | 1.1 | .1 | 2 | 42 | 45 | 0 | - | - | .0 | - | 120 |
| 8 | 13 | 62 | 15.9 | 9.7 | 8.0 | - | 6 | .3 | 1.0 | .1 | 2 | 42 | 45 | 0 | - | 5 | .0 | 43 | 92 |
| 8 | 20 | 62 | 16.1 | 9.8 | 8.0 | - | 5 | .3 | .9 | .1 | 2 | 42 | 45 | 0 | - | 4 | .0 | 44 | *1 |
| 8 | 27 | 62 | 16.8 | 9.8 | 7.8 | - | 5 | .3 | 1.0 | .1 | 2 | 42 | 45 | 0 | - | - | .0 | - | 950 |
| 9 | 3 | 62 | 16.9 | 9.7 | 7.9 | - | 5 | .3 | 1.1 | .1 | 2 | 42 | 45 | 0 | - | 1 | .0 | 59 | 38 |
| 9 | 10 | 62 | 15.5 | 9.9 | 8.0 | - | 5 | .4 | 1.1 | .1 | 2 | 42 | 45 | 0 | - | - | .0 | - | 20 |
| 9 | 17 | 62 | 13.9 | 10.1 | 8.0 | - | 5 | .5 | 1.2 | .1 | 2 | 42 | 45 | 0 | - | 7 | .0 | - | 38 |
| 9 | 24 | 62 | 13.2 | 10.5 | 8.0 | - | 5 | .5 | 1.1 | .1 | 2 | 42 | 45 | 0 | - | 3 | .0 | 70 | 11 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Supplied by U.S. Army Corps of Engineers
U.S. Lake Survey

MAJOR BASIN Western Great Lakes

MINOR BASIN Lake Superior

STATION LOCATION St. Marys River at
Sault Ste. Marie, Michigan

| October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 58.000 | 65.000 | 65.000 | 64.000 | 65.000 | 67.000 | 67.000 | 60.000 | 60.000 | 60.000 | 61.000 | 70.000 |

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** LAKE SUPERIOR

**STATION LOCATION** LAKE SUPERIOR AT DULUTH, MINNESOTA

16

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 16 | - | - | - | - | - | - | 0 | 5 | 1 | 6 | 1 | 8 | | | | | | | |
| 10 | 10 | 61 | 10 | 31 | - | - | - | - | - | - | 3 | 4 | 5 | 4 | 8 | 6 | | | | | | | |
| 10 | 16 | 61 | 10 | 31 | - | - | - | - | - | - | 13 | 5 | 2 | 6 | 15 | 8 | | | | | | | |
| 10 | 23 | 61 | 11 | 2 | - | - | - | - | - | - | 0 | 5 | 2 | 5 | 2 | 7 | | | | | | | |
| 10 | 30 | 61 | 11 | 9 | - | - | - | - | - | - | 1 | 5 | 5 | 5 | 6 | 7 | | | | | | | |
| 11 | 6 | 61 | 11 | 21 | - | - | - | - | - | - | 0 | 5 | 5 | 5 | 5 | 7 | | | | | | | |
| 11 | 13 | 61 | 11 | 24 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 5 | 6 | 5 | 8 | 7 | | | | | | | |
| 11 | 20 | 61 | 11 | 30 | - | - | - | - | - | - | 1 | 5 | 3 | 6 | 4 | 8 | | | | | | | |
| 11 | 27 | 61 | 12 | 12 | - | - | - | - | - | - | 2 | 5 | 2 | 5 | 4 | 7 | | | | | | | |
| 12 | 4 | 61 | 12 | 15 | - | - | - | - | - | - | 1 | 5 | 2 | 5 | 3 | 7 | | | | | | | |
| 12 | 11 | 61 | 12 | 20 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 4 | 4 | 4 | 10 | 6 | | | | | | | |
| 12 | 18 | 61 | 1 | 3 | - | - | - | - | - | - | 3 | 6 | 3 | 5 | 6 | 8 | | | | | | | |
| 1 | 2 | 62 | 1 | 11 | - | - | - | - | - | - | 11 | 6 | 1 | 5 | 12 | 8 | | | | | | | |
| 1 | 8 | 62 | 1 | 17 | 0 | 0 | 0 | 1 | 0 | 1 | 10 | 4 | 10 | 4 | 20 | 6 | | | | | | | |
| 1 | 15 | 62 | 1 | 24 | - | - | - | - | - | - | 0 | 4 | 4 | 4 | 4 | 6 | | | | | | | |
| 1 | 22 | 62 | 1 | 30 | - | - | - | - | - | - | 2 | 4 | 2 | 4 | 4 | 6 | | | | | | | |
| 1 | 29 | 62 | 2 | 6 | - | - | - | - | - | - | 6 | 6 | 19 | 7 | 25 | 9 | | | | | | | |
| 2 | 5 | 62 | 2 | 14 | - | - | - | - | - | - | 0 | 6 | 0 | 5 | 0 | 8 | | | | | | | |
| 2 | 13 | 62 | 2 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 7 | 4 | 7 | 5 | | | | | | | |
| 2 | 19 | 62 | 3 | 2 | - | - | - | - | - | - | 0 | 5 | 2 | 5 | 2 | 7 | | | | | | | |
| 2 | 26 | 62 | 3 | 12 | - | - | - | - | - | - | 2 | 4 | 4 | 4 | 6 | 5 | | | | | | | |
| 3 | 5 | 62 | 3 | 15 | - | - | - | - | - | - | 8 | 5 | 3 | 5 | 11 | 7 | | | | | | | |
| 3 | 12 | 62 | 3 | 22 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 4 | 0 | 4 | 0 | 5 | | | | | | | |
| 3 | 19 | 62 | 3 | 30 | - | - | - | - | - | - | 29 | 4 | 0 | 5 | 29 | 6 | | | | | | | |
| 3 | 26 | 62 | 4 | 12 | - | - | - | - | - | - | 2 | 4 | 4 | 4 | 6 | 6 | | | | | | | |
| 4 | 2 | 62 | 4 | 16 | - | - | - | - | - | - | 2 | 5 | 5 | 5 | 7 | 7 | | | | | | | |
| 4 | 9 | 62 | 4 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 3 | 4 | 5 | 5 | | | | | | | |
| 4 | 16 | 62 | 4 | 27 | - | - | - | - | - | - | 3 | 5 | 3 | 6 | 6 | 7 | | | | | | | |
| 4 | 23 | 62 | 5 | 22 | - | - | - | - | - | - | 9 | 6 | 11 | 7 | 20 | 9 | | | | | | | |
| 5 | 7 | 62 | 6 | 11 | - | - | - | - | - | - | 1 | 6 | 4 | 7 | 5 | 9 | | | | | | | |
| 5 | 14 | 62 | 6 | 22 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 5 | 9 | 6 | 10 | 8 | | | | | | | |
| 5 | 21 | 62 | 6 | 26 | - | - | - | - | - | - | 4 | 5 | 4 | 6 | 8 | 8 | | | | | | | |
| 5 | 28 | 62 | 6 | 30 | - | - | - | - | - | - | 17 | 4 | 6 | 3 | 23 | 5 | | | | | | | |
| 6 | 4 | 62 | 6 | 4 | - | - | - | - | - | - | 0 | 7 | 9 | 6 | 9 | 9 | | | | | | | |
| 6 | 11 | 62 | 8 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 5 | 5 | 6 | 7 | 7 | | | | | | | |
| 6 | 18 | 62 | 7 | 16 | - | - | - | - | - | - | 2 | 5 | 7 | 6 | 9 | 7 | | | | | | | |
| 6 | 25 | 62 | 7 | 24 | - | - | - | - | - | - | 15 | 8 | 2 | 5 | 17 | 9 | | | | | | | |
| 7 | 2 | 62 | 7 | 31 | - | - | - | - | - | - | 0 | 6 | 4 | 7 | 4 | 9 | | | | | | | |
| 7 | 9 | 62 | 8 | 8 | 0 | 0 | 1 | 2 | 1 | 2 | 0 | 5 | 3 | 6 | 3 | 7 | | | | | | | |
| 7 | 16 | 62 | 10 | 1 | - | - | - | - | - | - | 1 | 5 | 3 | 5 | 4 | 7 | | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 7 | 23 | 62 | 8 | 9 | - | - | - | - | - | - | 4 | 5 | 10 | 5 | 14 | 7 | | | | | | |
| 7 | 30 | 62 | 9 | 19 | - | - | - | - | - | - | 3 | 6 | 4 | 6 | 7 | 8 | | | | | | |
| 8 | 6 | 62 | 8 | 27 | - | - | - | - | - | - | 3 | 6 | 7 | 5 | 10 | 7 | | | | | | |
| 8 | 13 | 62 | 8 | 29 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 5 | 5 | 6 | 12 | 7 | | | | | | |
| 8 | 20 | 62 | 9 | 5 | - | - | - | - | - | - | 4 | 5 | 3 | 6 | 7 | 7 | | | | | | |
| 8 | 27 | 62 | 9 | 17 | - | - | - | - | - | - | 10 | 7 | 10 | 8 | 20 | 11 | | | | | | |
| 9 | 4 | 62 | 10 | 1 | - | - | - | - | - | - | 5 | 5 | 4 | 5 | 9 | 7 | | | | | | |
| 9 | 17 | 62 | 10 | 10 | - | - | - | - | - | - | 2 | 5 | 6 | 5 | 8 | 7 | | | | | | |
| 9 | 24 | 62 | 10 | 16 | - | - | - | - | - | - | 1 | 6 | 3 | 5 | 4 | 7 | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 58 | 77 | 95 | 6 | 56 | 4 | 25 | 2 | 11 | 0 | 0 | 5 | 11 | 1 | | | | | | | | | 4 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 58 | 34 | 95 | 32 | 56 | 9 | 47 | 5 | 20 | 0 | 0 | 2 | | | | | | | | | | | 3 | 76 | 1 | | | | | 0 | 0 |
| 11 | 6 | 61 | 25 | 19 | 95 | 18 | 24 | 14 | 77 | 12 | 37 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 25 | 17 | 9 | 11 | 94 | 8 | 47 | 7 | 57 | 0 | 0 | 3 | | | | | | | | | | | 5 | 76 | 1 | | | | | 0 | 0 |
| 12 | 4 | 61 | 60 | 16 | 25 | 13 | 91 | 13 | 81 | 12 | 46 | 0 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 25 | 18 | 9 | 16 | 91 | 13 | 81 | 11 | 42 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 25 | 18 | 84 | 13 | 95 | 11 | 89 | 7 | 51 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 84 | 9 | 25 | 8 | 84 | 8 | 14 | 6 | 69 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 60 | 21 | 89 | 16 | 9 | 13 | 81 | 12 | 38 | 0 | 10 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 89 | 19 | 60 | 15 | 24 | 14 | 9 | 13 | 39 | 0 | 0 | 2 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 76 | 32 | 81 | 8 | 60 | 7 | 67 | 6 | 47 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 89 | 22 | 77 | 8 | 82 | 7 | 60 | 7 | 56 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 77 | 27 | 91 | 18 | 92 | 10 | 45 | 5 | 40 | 0 | 0 | 0 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 47 | 19 | 77 | 11 | 92 | 9 | 9 | 9 | 52 | 0 | 0 | 0 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 25 | 19 | 91 | 18 | 60 | 10 | 84 | 6 | 47 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 91 | 29 | 30 | 17 | 9 | 13 | 60 | 8 | 33 | 0 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 60 | 40 | 28 | 26 | 46 | 7 | 92 | 7 | 20 | 0 | 10 | 7 | | | | | | | | | | | 11 | 50 | 1 | 77 | 1 | | | 1 | 0 |
| 7 | 16 | 62 | 60 | 32 | 30 | 20 | 56 | 13 | 91 | 9 | 26 | 0 | 0 | 4 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 95 | 60 | 56 | 8 | 47 | 6 | 28 | 4 | 22 | 0 | 10 | 14 | 10 | 1 | | | | | | | | | 24 | 51 | 2 | 52 | 2 | 73 | 1 | 0 | 0 |
| 8 | 20 | 62 | 95 | 49 | 9 | 20 | 91 | 4 | 24 | 4 | 23 | 0 | 0 | 41 | 10 | 2 | 21 | 2 | 17 | 1 | | | | | 21 | 50 | 2 | 77 | 2 | 51 | 1 | 0 | 0 |
| 9 | 4 | 62 | 95 | 82 | 9 | 4 | 47 | 3 | 30 | 1 | 10 | 0 | 0 | 285 | 11 | 6 | 17 | 3 | 10 | 3 | | | | | 27 | 76 | 3 | 50 | 2 | 51 | 1 | 0 | 0 |
| 9 | 17 | 62 | 95 | 61 | 9 | 8 | 82 | 8 | 24 | 7 | 16 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** MINNESOTA
**MAJOR BASIN** WESTERN GREAT LAKES
**MINOR BASIN** LAKE SUPERIOR
**STATION LOCATION** LAKE SUPERIOR AT
DULUTH, MINNESOTA

16

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 10 | 61 | 10 | 23 | 6818 | 96 | 23 | 73 | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 14 | 61 | 11 | 28 | 6877 | 81 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 4 | 61 | 12 | 18 | 7102 | 65 | 12 | 53 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 4 | 61 | | * | 20797 | 85 | 18 | 67 | 4 | 5 | 3 | 1 | 0 | 2 | 0 | 1 | 1 | 0 | 4 |
| 1 | 2 | 62 | 1 | 15 | 5565 | 86 | 16 | 70 | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 5 | 62 | 2 | 19 | 6667 | 96 | 12 | 84 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 5 | 62 | 3 | 19 | 6742 | 74 | 16 | 58 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 5 | 62 | | * | 18974 | 85 | 15 | 70 | 1 | 5 | 4 | 1 | 0 | 3 | 0 | 1 | 1 | 0 | 3 |
| 4 | 2 | 62 | 4 | 16 | 6105 | 101 | 25 | 76 | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 7 | 62 | 5 | 21 | 5827 | 68 | 24 | 44 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 4 | 62 | 6 | 18 | 6232 | 79 | 22 | 57 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 4 | 62 | | * | 18164 | 83 | 23 | 60 | 2 | 9 | 5 | 1 | 1 | 3 | 0 | 2 | 2 | 0 | 3 |
| 7 | 2 | 62 | 7 | 16 | 6135 | 88 | 33 | 55 | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 6 | 62 | 8 | 20 | 5130 | 90 | 31 | 59 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 4 | 62 | 9 | 17 | 6202 | 93 | 18 | 75 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 4 | 62 | | * | 17467 | 90 | 27 | 63 | 3 | 9 | 4 | 1 | 0 | 3 | 0 | 2 | 2 | 0 | 7 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 12.2 | 10.5 | 7.6 | .3 | 8 | .8 | 1.9 | .0 | 2 | 42 | 44 | 0 | 2 | 3 | .0 | 47 | 40 |
| 10 | 10 | 61 | 12.2 | 10.6 | 7.7 | .4 | 9 | .8 | 2.0 | .0 | 2 | 43 | 44 | 0 | 1 | 3 | .0 | 60 | 3 |
| 10 | 16 | 61 | 10.0 | 11.1 | 7.6 | .4 | 9 | .7 | 1.7 | .0 | 2 | 42 | 44 | 0 | 0 | 3 | .0 | 56 | 4 |
| 10 | 23 | 61 | 8.9 | 11.2 | 7.8 | .3 | 9 | .7 | 1.6 | .0 | 2 | 42 | 44 | 5 | 0 | 3 | .0 | 49 | *1 |
| 10 | 30 | 61 | 8.8 | 11.4 | 7.8 | .5 | 9 | .8 | 1.6 | .0 | 2 | 43 | 44 | 0 | 0 | 3 | .0 | 50 | *1 |
| 11 | 6 | 61 | 5.6 | 12.5 | 7.5 | .4 | 7 | .7 | 1.7 | .0 | 2 | 42 | 44 | 0 | 1 | 3 | .0 | 50 | 17 |
| 11 | 13 | 61 | 6.1 | 12.1 | 7.6 | .4 | 6 | .8 | 1.7 | .0 | 2 | 42 | 43 | 0 | 0 | 3 | .0 | 60 | - |
| 11 | 20 | 61 | 5.6 | 12.2 | 7.7 | .5 | 9 | .7 | 1.7 | .0 | 3 | 42 | 44 | 5 | 1 | 3 | .0 | 58 | 200 |
| 11 | 27 | 61 | 5.6 | 12.4 | 7.5 | .4 | 8 | .6 | 1.4 | .0 | 2 | 42 | 44 | 0 | 1 | 3 | .0 | 68 | 1 |
| 12 | 4 | 61 | 5.0 | 12.3 | 7.8 | .5 | 8 | .8 | 1.7 | .0 | 2 | 42 | 44 | 0 | 0 | 3 | .0 | 54 | *1 |
| 12 | 11 | 61 | 4.4 | 12.6 | 7.6 | .2 | 7 | .6 | 1.7 | .0 | 2 | 42 | 44 | 0 | 0 | 3 | .0 | 56 | *1 |
| 12 | 18 | 61 | 4.4 | 12.5 | 7.5 | .4 | 8 | .6 | 1.6 | .0 | 2 | 42 | 44 | 0 | 0 | 3 | .0 | 52 | *1 |
| 1 | 2 | 62 | 3.3 | 12.9 | 7.5 | .3 | 7 | .6 | 1.4 | .0 | 2 | 42 | 44 | 5 | 0 | 3 | .0 | 50 | 2 |
| 1 | 8 | 62 | 2.8 | 13.1 | 7.5 | .3 | 6 | .5 | 1.2 | .0 | 2 | 42 | 44 | 0 | 1 | 2 | .0 | 52 | *1 |
| 1 | 15 | 62 | 2.2 | 13.2 | 7.5 | .5 | 6 | .6 | 1.4 | .0 | 2 | 42 | 44 | 0 | 0 | 3 | .0 | 57 | *1 |
| 1 | 22 | 62 | 2.2 | 13.1 | 7.6 | .6 | 7 | .8 | 1.5 | .0 | 2 | 42 | 43 | 5 | 0 | 3 | .0 | 55 | *1 |
| 1 | 29 | 62 | 1.7 | 13.3 | 7.5 | .5 | 10 | .6 | 1.5 | .0 | 2 | 42 | 44 | 0 | 0 | 3 | .0 | 47 | 3 |
| 2 | 5 | 62 | .6 | 13.6 | 7.5 | .3 | 9 | .6 | 1.5 | .0 | 2 | 42 | 44 | 5 | 0 | 3 | .0 | 46 | 1 |
| 2 | 13 | 62 | 1.7 | 13.4 | 7.5 | .5 | 7 | .7 | 1.6 | .0 | 2 | 43 | 45 | 5 | 0 | 3 | .0 | 56 | 1 |
| 2 | 19 | 62 | 1.1 | 13.8 | 7.5 | .5 | 10 | .8 | 1.4 | .0 | 2 | 43 | 45 | 5 | 1 | 3 | .0 | 49 | *1 |
| 2 | 26 | 62 | 1.7 | 13.8 | 7.5 | .3 | 8 | .6 | 1.3 | .0 | 2 | 43 | 45 | 5 | 0 | 3 | .0 | 51 | *1 |
| 3 | 5 | 62 | 1.7 | 13.7 | 7.5 | .3 | 9 | .6 | 1.5 | .0 | 2 | 43 | 45 | 5 | 0 | 3 | .0 | 60 | *1 |
| 3 | 12 | 62 | 1.1 | 13.6 | 7.6 | .5 | 10 | .6 | 1.5 | .0 | 2 | 43 | 45 | 5 | 0 | 3 | .0 | 54 | *1 |
| 3 | 19 | 62 | 1.1 | 13.8 | 7.6 | .9 | 7 | .7 | 1.7 | .0 | 2 | 43 | 45 | 5 | 0 | 3 | .0 | 49 | - |
| 3 | 26 | 62 | 1.1 | 13.7 | 7.5 | .4 | 8 | .6 | 1.4 | .0 | 2 | 44 | 45 | 5 | 0 | 3 | .0 | 53 | *1 |
| 4 | 2 | 62 | 1.1 | 13.6 | 7.6 | .4 | 11 | .6 | 1.3 | .0 | 2 | 42 | 43 | 0 | 0 | 3 | .0 | 57 | 33 |
| 4 | 9 | 62 | 1.7 | 13.6 | 7.5 | .6 | 10 | .5 | 1.5 | .0 | 2 | 43 | 44 | 5 | 0 | 3 | .0 | 56 | 16 |
| 4 | 16 | 62 | 2.2 | 13.8 | 7.5 | .6 | 8 | .7 | 1.5 | .0 | 2 | 42 | 43 | 5 | 0 | 3 | .0 | 53 | - |
| 4 | 23 | 62 | 2.2 | 13.7 | 7.7 | .6 | 8 | .5 | 1.3 | .0 | 2 | 43 | 43 | 5 | 0 | 3 | .0 | 55 | 1 |
| 5 | 7 | 62 | 2.8 | 13.6 | 7.7 | .9 | 9 | .7 | 1.6 | .0 | 2 | 42 | 43 | 5 | 0 | 3 | .0 | 60 | *1 |
| 5 | 14 | 62 | 3.3 | 13.6 | 7.6 | .4 | 12 | .7 | 1.5 | .0 | 2 | 42 | 43 | 5 | 1 | 3 | .0 | 56 | 14 |
| 5 | 21 | 62 | 3.3 | 13.5 | 7.6 | .3 | 9 | .7 | 1.4 | .0 | 2 | 42 | 43 | 0 | 1 | 3 | .0 | 60 | 11 |
| 5 | 28 | 62 | 3.9 | 13.5 | 7.5 | .5 | 12 | .7 | 1.5 | .0 | 2 | 42 | 43 | 5 | 1 | 3 | .0 | 58 | 5 |
| 6 | 4 | 62 | 4.4 | 13.5 | 7.4 | .6 | 9 | .8 | 1.4 | .0 | 2 | 42 | 43 | 5 | 0 | 3 | .0 | 58 | *1 |
| 6 | 14 | 62 | 4.4 | 13.3 | 7.6 | .4 | 10 | .6 | 1.3 | .0 | 2 | 42 | 43 | 5 | 0 | 3 | .0 | 57 | - |
| 6 | 18 | 62 | 3.3 | 13.2 | 7.4 | .3 | 8 | .5 | 1.2 | .0 | 2 | 42 | 44 | 0 | 0 | 4 | .0 | 59 | 1 |
| 6 | 25 | 62 | 5.6 | 13.0 | 7.6 | .3 | 8 | .7 | 1.6 | .0 | 2 | 43 | 44 | 5 | 1 | 4 | .0 | 58 | *1 |
| 7 | 2 | 62 | 4.4 | 11.6 | 7.6 | .5 | 11 | 1.1 | 1.9 | .1 | 2 | 43 | 44 | 5 | 2 | 4 | .0 | 64 | 20 |
| 7 | 9 | 62 | 5.0 | 11.5 | 7.6 | .4 | 10 | .9 | 1.7 | .0 | 2 | 42 | 43 | 5 | 0 | 3 | .0 | 56 | 1 |

**STATION LOCATION** LAKE SUPERIOR AT

DULUTH, MINNESOTA

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 16 | 62 | 11.0 | 12.5 | 7.6 | .5 | 11 | .9 | 1.8 | .0 | 2 | 42 | 44 | 0 | 2 | 3 | .0 | 61 | 13 |
| 7 | 23 | 62 | 12.8 | 11.6 | 7.5 | .8 | 11 | .8 | 1.8 | .0 | 2 | 43 | 45 | 5 | 2 | 4 | .0 | 61 | - |
| 7 | 30 | 62 | 5.0 | 12.7 | 7.5 | 1.2 | 9 | .6 | 1.2 | .0 | 2 | 43 | 44 | 0 | 0 | 3 | .0 | 59 | *1 |
| 8 | 6 | 62 | 13.9 | 11.7 | 7.7 | 1.0 | 9 | .8 | 1.9 | .0 | 2 | 42 | 43 | 0 | 0 | 3 | .0 | 60 | 2 |
| 8 | 13 | 62 | 14.4 | 10.6 | 7.7 | .7 | 10 | .7 | 1.5 | .0 | 2 | 43 | 44 | 0 | 0 | 3 | .0 | 54 | 2 |
| 8 | 20 | 62 | 13.3 | 10.7 | 7.6 | .5 | 10 | .7 | 1.6 | .0 | 2 | 42 | 43 | 5 | 2 | 3 | .0 | 60 | 3 |
| 8 | 27 | 62 | 13.9 | 10.5 | 7.7 | .4 | 10 | .7 | 1.5 | .0 | 2 | 42 | 43 | 5 | 1 | 3 | .0 | 53 | 11 |
| 9 | 4 | 62 | 16.7 | 10.0 | 7.5 | .5 | 12 | .6 | 1.6 | .0 | 2 | 43 | 44 | 5 | 0 | 3 | .0 | 52 | *3 |
| 9 | 11 | 62 | 14.4 | 10.4 | 7.6 | .5 | 8 | .5 | 1.5 | .0 | 2 | 43 | 44 | 5 | 0 | 3 | .0 | 58 | 3 |
| 9 | 17 | 62 | 8.9 | 11.7 | 7.5 | .4 | 7 | .5 | 1.4 | .0 | 2 | 42 | 43 | 0 | 0 | 3 | .0 | 65 | 4 |
| 9 | 24 | 62 | 8.3 | 11.9 | 7.5 | .4 | 11 | .5 | 1.2 | .0 | 2 | 42 | 43 | 5 | 0 | 3 | .0 | 60 | 30 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Supplied by U.S. Army Corps of Engineers
U.S. Lake Survey

MAJOR BASIN Western Great Lakes

MINOR BASIN Lake Superior

STATION LOCATION Lake Superior at
Duluth, Minnesota

| October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|

FLOW DATA NOT APPLICABLE --- LAKE LEVELS ONLY

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10 |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS |
| 6 | 25 | 62 | 2600 | 0 | 0 | 190 | 0 | 0 | 0 | 550 | 1860 | 170 | 2030 | 92 | 2 | 97 | 1 | 82 | 1 | 79 | 1 | 87 | 1 | | | | | | | | | |
| 7 | 16 | 62 | 2300 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 2280 | 0 | 630 | 92 | 5 | 82 | 4 | 97 | 1 | 88 | 1 | 87 | 1 | | | | | | | | | |
| 8 | 6 | 62 | 700 | 0 | 0 | 0 | 40 | 0 | 40 | 0 | 620 | 0 | 0 | 97 | 1 | | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 800 | 0 | 0 | 40 | 0 | 0 | 0 | 40 | 680 | 0 | 590 | 79 | 1 | 97 | 1 | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 1000 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 890 | 80 | 630 | 79 | 2 | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 1400 | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 1400 | 20 | 260 | 88 | 2 | 87 | 1 | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 6 | 25 | 62 | 92 | 20 | 36 | 11 | 41 | 11 | 15 | 7 | 51 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 92 | 60 | 36 | 25 | 41 | 3 | 47 | 1 | 11 | 80 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 41 | 34 | 36 | 24 | 16 | 9 | 92 | 9 | 24 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 15 | 30 | 41 | 12 | 16 | 8 | 36 | 5 | 45 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 16 | 48 | 64 | 5 | 78 | 4 | 41 | 4 | 39 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 67 | 22 | 70 | 16 | 92 | 6 | 15 | 5 | 51 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

**MAJOR BASIN** COLORADO RIVER

**MINOR BASIN** GREEN RIVER

**STATION LOCATION** GREEN RIVER AT
DUTCH JOHN, UTAH

# RADIOACTIVITY DETERMINATIONS

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g |
| 7 | 23 | 62 | 8 | 20 | 0 | 1 | 1 | 2 | 1 | 2 | 8 | 5 | 41 | 6 | 49 | 7 | | | | | |
| 7 | 30 | 62 | 8 | 17 | 1 | 1 | 2 | 2 | 3 | 2 | 19 | 12 | 30 | 14 | 49 | 18 | | | | | |
| 8 | 6 | 62 | 8 | 28 | 0 | 1 | 1 | 2 | 1 | 2 | 7 | 11 | 36 | 14 | 43 | 18 | | | | | |
| 8 | 13 | 62 | 8 | 30 | 0 | 2 | 1 | 2 | 1 | 3 | 14 | 13 | 26 | 13 | 40 | 18 | | | | | |
| 8 | 20 | 62 | 9 | 5 | 0 | 3 | 1 | 2 | 1 | 4 | 11 | 7 | 18 | 7 | 29 | 10 | | | | | |
| 8 | 27 | 62 | 9 | 13 | 3 | 2 | 3 | 3 | 6 | 4 | 6 | 13 | 13 | 14 | 19 | 19 | | | | | |
| 9 | 4 | 62 | 9 | 17 | 1 | 1 | 2 | 2 | 3 | 2 | 14 | 15 | 13 | 16 | 27 | 22 | | | | | |
| 9 | 10 | 62 | 9 | 26 | 1 | 1 | 5 | 3 | 6 | 3 | 4 | 10 | 18 | 14 | 22 | 17 | | | | | |
| 9 | 17 | 62 | 10 | 14 | 2 | 1 | 2 | 2 | 4 | 2 | 3 | 12 | 8 | 15 | 11 | 19 | | | | | |
| 9 | 24 | 62 | 10 | 18 | 6 | 3 | 3 | 3 | 9 | 4 | 40 | 16 | 34 | 15 | 74 | 22 | | | | | |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** UTAH
**MAJOR BASIN** COLORADO RIVER
**MINOR BASIN** GREEN RIVER
**STATION LOCATION** GREEN RIVER AT
DUTCH JOHN, UTAH 121

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 23 | 62 | - | - | - | - | - | - | - | - | 12 | 148 | 184 | 10 | 53 | 95 | .0 | 293 | - |
| 7 | 30 | 62 | - | - | - | - | - | - | - | - | 10 | 132 | 176 | 5 | 25 | 105 | .0 | 318 | - |
| 8 | 6 | 62 | - | - | 7.8 | - | - | - | - | - | 11 | 140 | 196 | - | 0 | 115 | .0 | 326 | - |
| 8 | 13 | 62 | - | - | - | - | - | - | - | - | 7 | 138 | 196 | 0 | - | 120 | .0 | 330 | - |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | 11 | 128 | 216 | 0 | - | 150 | .0 | 370 | - |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | 15 | 128 | 212 | 5 | 25 | 155 | .0 | 390 | - |
| 9 | 10 | 62 | - | - | - | - | - | - | - | - | 16 | 152 | 228 | 5 | 25 | 175 | .0 | 437 | - |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | 17 | 120 | 212 | 5 | *25 | 195 | .0 | 435 | - |
| 9 | 24 | 62 | - | - | 7.9 | - | - | - | - | - | 12 | 122 | 250 | 0 | 230 | 120 | .0 | 494 | - |

PROVISIONAL--SUBJECT TO REVISION

MINOR BASIN Green River

Gaging Station near Greendale, Utah
Operated by U.S. Geological Survey

STATION LOCATION Green River at
Dutch John, Utah

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .969 | 1.050 | .946 | .900 | .700 | .844 | 7.790 | 7.540 | 4.920 | 9.860 | 3.000 | .952 |
| 2 | .940 | 1.090 | .963 | .900 | .700 | .833 | 7.460 | 6.490 | 4.500 | 9.760 | 3.030 | .934 |
| 3 | .912 | .912 | .918 | .900 | .700 | .874 | 7.930 | 5.710 | 4.340 | 9.160 | 2.840 | .923 |
| 4 | .891 | .992 | .802 | .900 | .700 | .934 | 6.940 | 5.340 | 4.520 | 8.140 | 2.690 | .912 |
| 5 | .864 | .957 | .749 | .900 | .800 | .885 | 6.500 | 5.320 | 5.100 | 7.290 | 2.470 | .880 |
| 6 | .854 | .952 | .700 | .900 | .800 | .918 | 6.190 | 5.480 | 6.190 | 6.740 | 2.320 | .849 |
| 7 | .854 | .838 | .640 | .900 | .800 | .918 | 5.890 | 6.240 | 7.330 | 6.270 | 2.230 | .818 |
| 8 | .952 | .744 | .530 | .900 | 1.000 | .940 | 5.800 | 7.040 | 7.350 | 5.670 | 2.140 | .780 |
| 9 | 1.050 | .714 | .450 | .600 | 1.000 | .849 | 5.680 | 7.750 | 6.840 | 5.100 | 2.080 | .744 |
| 10 | 1.010 | .775 | .350 | .600 | 1.000 | .885 | 5.490 | 8.560 | 6.430 | 4.710 | 2.030 | .722 |
| 11 | 1.090 | .980 | .350 | .600 | 1.000 | .808 | 5.070 | 8.880 | 5.850 | 4.580 | 1.930 | .681 |
| 12 | 1.370 | 1.110 | .370 | .600 | 1.300 | .784 | 4.740 | 9.110 | 5.370 | 4.500 | 1.820 | .678 |
| 13 | 1.760 | 1.080 | .400 | .600 | 2.000 | .794 | 4.540 | 9.190 | 5.320 | 4.350 | 1.760 | .674 |
| 14 | 1.620 | 1.060 | .440 | .600 | 4.500 | .791 | 4.480 | 9.030 | 6.010 | 4.260 | 1.740 | .678 |
| 15 | 1.320 | 1.050 | .480 | .600 | 5.610 | .780 | 4.670 | 8.650 | 7.180 | 4.330 | 1.720 | .674 |
| 16 | 1.220 | 1.010 | .520 | .600 | 3.960 | .794 | 5.190 | 8.120 | 8.280 | 4.900 | 1.650 | .659 |
| 17 | 1.150 | .697 | .570 | .600 | 2.970 | .828 | 5.930 | 7.350 | 9.080 | 5.260 | 1.560 | .659 |
| 18 | 1.090 | .553 | .630 | .600 | 2.240 | .864 | 6.320 | 6.670 | 9.540 | 4.920 | 1.510 | .638 |
| 19 | 1.050 | .560 | .690 | .600 | 1.670 | .901 | 5.980 | 5.930 | 9.170 | 4.420 | 1.460 | .638 |
| 20 | .998 | .580 | .770 | .600 | 1.430 | .969 | 5.710 | 5.440 | 8.410 | 3.870 | 1.420 | .635 |
| 21 | .986 | .600 | .860 | .600 | 1.150 | 1.030 | 5.620 | 4.950 | 8.050 | 3.450 | 1.400 | .652 |
| 22 | .952 | .700 | .940 | .600 | 1.210 | 1.040 | 5.790 | 4.540 | 8.470 | 3.160 | 1.380 | .784 |
| 23 | .912 | .860 | .940 | .600 | 1.090 | 1.450 | 6.430 | 4.460 | 9.430 | 2.960 | 1.380 | .674 |
| 24 | .901 | 1.000 | .940 | .600 | .934 | 1.400 | 7.180 | 4.960 | 10.400 | 3.000 | 1.350 | .670 |
| 25 | .907 | 1.150 | .940 | .600 | .722 | 1.440 | 7.080 | 4.860 | 10.800 | 2.900 | 1.310 | .706 |
| 26 | .912 | 1.200 | .940 | .700 | .659 | 2.020 | 7.250 | 4.800 | 10.700 | 2.750 | 1.250 | .701 |
| 27 | .934 | 1.030 | .900 | .700 | .714 | 3.630 | 7.430 | 4.860 | 10.300 | 2.670 | 1.230 | .701 |
| 28 | .969 | .986 | .900 | .700 | .736 | 11.400 | 7.810 | 5.100 | 10.100 | 2.620 | 1.190 | .722 |
| 29 | .986 | 1.050 | .900 | .700 |  | 11.600 | 8.040 | 5.300 | 9.940 | 2.620 | 1.130 | .718 |
| 30 | .880 | .924 | .900 | .700 |  | 10.300 | 7.710 | 5.740 | 9.920 | 2.730 | 1.050 | .706 |
| 31 | .896 |  | .900 | .700 |  | 12.900 |  | 5.490 |  | 2.980 | 1.010 |  |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 4 | 61 | 10 | 20 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 4 | 4 | 5 | 7 | 6 | | | | | | |
| 10 | 11 | 61 | 10 | 24 | - | - | - | - | - | - | 0 | 6 | 8 | 6 | 8 | 8 | | | | | | |
| 11 | 1 | 61 | 11 | 16 | - | - | - | - | - | - | 0 | 5 | 7 | 6 | 7 | 8 | | | | | | |
| 11 | 8 | 61 | 11 | 21 | 0 | 1 | 0 | 1 | 0 | 1 | 9 | 4 | 13 | 5 | 22 | 6 | | | | | | |
| 11 | 15 | 61 | 11 | 30 | - | - | - | - | - | - | 2 | 6 | 8 | 6 | 10 | 8 | | | | | | |
| 12 | 13 | 61 | 12 | 26 | - | - | - | - | - | - | 10 | 7 | 14 | 6 | 24 | 9 | | | | | | |
| 12 | 20 | 61 | 1 | 8 | 1 | 1 | 0 | 1 | 1 | 1 | 13 | 5 | 21 | 5 | 34 | 7 | | | | | | |
| 1 | 3 | 62 | 1 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 13 | 4 | 25 | 5 | 38 | 6 | | | | | | |
| 1 | 24 | 62 | 2 | 2 | - | - | - | - | - | - | 19 | 6 | 36 | 7 | 55 | 9 | | | | | | |
| 1 | 31 | 62 | 2 | 13 | - | - | - | - | - | - | 18 | 4 | 33 | 5 | 51 | 6 | | | | | | |
| 2 | 7 | 62 | 2 | 19 | 0 | 0 | 0 | 1 | 0 | 1 | 14 | 4 | 37 | 6 | 51 | 7 | | | | | | |
| 2 | 14 | 62 | 3 | 2 | - | - | - | - | - | - | 14 | 4 | 38 | 6 | 52 | 7 | | | | | | |
| 2 | 28 | 62 | 3 | 14 | - | - | - | - | - | - | 28 | 6 | 55 | 7 | 83 | 9 | | | | | | |
| 3 | 7 | 62 | 3 | 20 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 4 | 25 | 5 | 30 | 6 | | | | | | |
| 3 | 12 | 62 | 3 | 23 | - | - | - | - | - | - | 11 | 5 | 37 | 7 | 48 | 9 | | | | | | |
| 3 | 28 | 62 | 4 | 9 | - | - | - | - | - | - | 32 | 5 | 41 | 6 | 73 | 7 | | | | | | |
| 4 | 4 | 62 | 4 | 18 | 1 | 1 | 0 | 1 | 1 | 1 | 25 | 5 | 25 | 5 | 50 | 7 | | | | | | |
| 4 | 11 | 62 | 4 | 26 | - | - | - | - | - | - | 5 | 6 | 25 | 6 | 30 | 9 | | | | | | |
| 4 | 18 | 62 | 5 | 23 | - | - | - | - | - | - | 0 | 8 | 7 | 7 | 7 | 11 | | | | | | |
| 4 | 25 | 62 | 6 | 19 | - | - | - | - | - | - | 4 | 6 | 15 | 7 | 19 | 9 | | | | | | |
| 5 | 9 | 62 | 6 | 15 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 5 | 13 | 6 | 13 | 7 | | | | | | |
| 5 | 23 | 62 | 6 | 30 | - | - | - | - | - | - | 2 | 3 | 10 | 3 | 12 | 4 | | | | | | |
| 6 | 6 | 62 | 10 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 6 | 7 | 7 | 11 | 9 | | | | | | |
| 6 | 13 | 62 | 7 | 13 | - | - | - | - | - | - | 7 | 7 | 12 | 4 | 19 | 8 | | | | | | |
| 6 | 20 | 62 | 8 | 14 | - | - | - | - | - | - | 6 | 5 | 11 | 6 | 17 | 7 | | | | | | |
| 6 | 27 | 62 | 7 | 24 | - | - | - | - | - | - | 9 | 5 | 15 | 6 | 24 | 7 | | | | | | |
| 7 | 11 | 62 | 8 | 8 | - | - | - | - | - | - | 6 | 6 | 7 | 8 | 13 | 10 | | | | | | |
| 8 | 1 | 62 | 8 | 23 | - | - | - | - | - | - | 4 | 5 | 10 | 6 | 14 | 7 | | | | | | |
| 8 | 8 | 62 | 8 | 28 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 5 | 11 | 6 | 12 | 7 | | | | | | |
| 8 | 15 | 62 | 8 | 30 | - | - | - | - | - | - | 3 | 5 | 8 | 6 | 11 | 7 | | | | | | |
| 8 | 29 | 62 | 9 | 18 | - | - | - | - | - | - | 5 | 7 | 11 | 10 | 16 | 12 | | | | | | |
| 9 | 5 | 62 | 9 | 19 | 1 | 1 | 0 | 1 | 1 | 1 | 7 | 5 | 20 | 7 | 27 | 9 | | | | | | |
| 9 | 12 | 62 | 10 | 5 | - | - | - | - | - | - | 4 | 7 | 52 | 9 | 56 | 11 | | | | | | |
| 9 | 19 | 62 | 10 | 15 | - | - | - | - | - | - | 3 | 5 | 11 | 7 | 14 | 9 | | | | | | |
| 9 | 26 | 62 | 12 | 14 | - | - | - | - | - | - | 5 | 6 | 10 | 7 | 15 | 9 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** NEW YORK
**MAJOR BASIN** NORTHEAST
**MINOR BASIN** LOWER HUDSON RIVER
**STATION LOCATION** HUDSON RIVER BELOW
POUGHKEEPSIE, NEW YORK 18

| DATE OF SAMPLE | | | TOTAL | ALGAE *(Number per milliliter)* | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 4 | 61 | 300 | 20 | 0 | 70 | 0 | 70 | 0 | 50 | 70 | 360 | 360 | | | | | | | | | | | | | | | | | | | | |
| 11 | 1 | 61 | 900 | 0 | 0 | 0 | 0 | 170 | 0 | 520 | 210 | 100 | 20 | 68 | 1 | 69 | 1 | | | | | | | | | | | | | | | | |
| 11 | 15 | 61 | 600 | 0 | 0 | 20 | 0 | 20 | 0 | 390 | 170 | 20 | 60 | 68 | 1 | 67 | 1 | | | | | | | | | | | | | | | | |
| 12 | 13 | 61 | 700 | 0 | 0 | 20 | 0 | 20 | 0 | 390 | 310 | 100 | 410 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 12 | 20 | 61 | 600 | 0 | 20 | 20 | 0 | 60 | 0 | 370 | 170 | 120 | 190 | 68 | 1 | 69 | 1 | | | | | | | | | | | | | | | | |
| 1 | 3 | 62 | 1300 | 20 | 0 | 90 | 0 | 110 | 0 | 540 | 540 | 50 | 160 | 69 | 1 | 68 | 1 | | | | | | | | | | | | | | | | |
| 1 | 24 | 62 | 900 | 50 | 90 | 70 | 0 | 0 | 0 | 160 | 540 | 20 | 110 | | | | | | | | | | | | | | | | | | | | |
| 1 | 31 | 62 | 200 | 0 | 0 | 0 | 0 | 70 | 20 | 20 | 90 | 50 | 180 | | | | | | | | | | | | | | | | | | | | |
| 2 | 7 | 62 | 400 | 0 | 0 | 0 | 0 | 60 | 40 | 80 | 170 | 40 | 60 | | | | | | | | | | | | | | | | | | | | |
| 3 | 7 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 20 | 80 | 150 | 20 | 60 | | | | | | | | | | | | | | | | | | | | |
| 4 | 4 | 62 | 1000 | 0 | 0 | 60 | 0 | 40 | 20 | 150 | 770 | 20 | 120 | 82 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 18 | 62 | 500 | 0 | 0 | 60 | 0 | 20 | 40 | 230 | 150 | 150 | 490 | | | | | | | | | | | | | | | | | | | | |
| 5 | 16 | 62 | 1400 | 0 | 0 | 20 | 20 | 160 | 90 | 790 | 360 | 250 | 540 | 69 | 2 | 68 | 1 | 67 | 1 | | | | | | | | | | | | | | |
| 6 | 6 | 62 | 1700 | 0 | 0 | 140 | 0 | 50 | 0 | 1090 | 380 | 140 | 160 | 69 | 2 | 68 | 2 | 92 | 1 | | | | | | | | | | | | | | |
| 6 | 20 | 62 | 2300 | 0 | 0 | 250 | 0 | 20 | 40 | 1640 | 350 | 350 | 230 | 69 | 3 | 68 | 2 | | | | | | | | | | | | | | | | |
| 7 | 11 | 62 | 121600 | 121320 | 0 | 20 | 0 | 0 | 0 | 170 | 40 | 0 | 130 | 4 | 9 | | | | | | | | | | | | | | | | | | |
| 8 | 1 | 62 | 1600 | 0 | 0 | 80 | 40 | 80 | 0 | 1100 | 340 | 340 | 380 | 68 | 3 | 69 | 1 | 84 | 1 | | | | | | | | | | | | | | |
| 8 | 29 | 62 | 1900 | 0 | 0 | 250 | 0 | 40 | 0 | 1220 | 340 | 250 | 420 | 68 | 1 | 69 | 1 | 67 | 1 | 71 | 1 | | | | | | | | | | | | |
| 9 | 5 | 62 | 800 | 0 | 0 | 80 | 0 | 60 | 0 | 410 | 290 | 250 | 120 | 68 | 1 | | | | | | | | | | | | | | | | | | |
| 9 | 19 | 62 | 300 | 30 | 0 | 70 | 0 | 60 | 0 | 110 | 0 | 260 | 20 | | | | | | | | | | | | | | | | | | | | |

**STATION LOCATION** HUDSON RIVER BELOW

POUGHKEEPSIE, NEW YORK 018

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA *(Identifiable) Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | | |
| | | | | | | | | | | | | | | | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | NUMBER PER LITER | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | NUMBER PER LITER | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| 10 | 4 | 61 | 19 | 18 | 29 | 13 | 58 | 13 | 26 | 10 | 46 | 0 | 0 | 3 | | | | | | | | | | | 4 | | | | | | | 0 | 0 |
| 11 | 1 | 61 | 29 | 39 | 58 | 13 | 56 | 10 | 19 | 5 | 33 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 15 | 61 | 19 | 22 | 29 | 19 | 58 | 7 | 26 | 5 | 47 | 0 | 0 | 0 | | | | | | | | | | | 5 | | | | | | | 0 | 0 |
| 12 | 13 | 61 | 56 | 23 | 19 | 20 | 29 | 8 | 26 | 5 | 44 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 20 | 61 | 29 | 31 | 19 | 22 | 36 | 6 | 41 | 6 | 35 | 0 | 0 | 31 | 11 | 3 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 1 | 3 | 62 | 56 | 24 | 19 | 9 | 29 | 9 | 58 | 7 | 51 | 0 | 0 | 12 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 24 | 62 | 19 | 15 | 29 | 10 | 58 | 10 | 36 | 7 | 58 | 20 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 31 | 62 | 2 | 8 | 29 | 7 | 19 | 7 | 92 | 6 | 72 | 20 | 0 | 6 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 7 | 62 | 19 | 10 | 56 | 7 | 26 | 7 | 29 | 6 | 70 | 0 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 3 | 7 | 62 | 19 | 17 | 29 | 13 | 92 | 10 | 85 | 7 | 53 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 4 | 62 | 36 | 17 | 19 | 10 | 92 | 8 | 88 | 5 | 60 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 4 | 18 | 62 | 92 | 9 | 36 | 8 | 58 | 8 | 29 | 8 | 67 | 20 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 16 | 62 | 56 | 22 | 92 | 11 | 58 | 10 | 29 | 8 | 49 | 50 | 0 | 5 | | | | | | | | | | | 15 | 76 | 3 | 50 | 1 | | | 1 | 0 |
| 6 | 6 | 62 | 56 | 42 | 58 | 30 | 29 | 8 | 87 | 4 | 16 | 0 | 0 | 95 | 11 | 5 | | | | | | | | | 124 | 51 | 5 | 50 | 2 | | | 0 | 0 |
| 6 | 20 | 62 | 56 | 35 | 58 | 32 | 57 | 24 | 25 | 1 | 8 | 0 | 0 | 153 | 22 | 5 | 2 | 2 | | | | | | | 7 | 50 | 1 | | | | | 0 | 0 |
| 7 | 11 | 62 | 19 | 34 | 56 | 17 | 29 | 12 | 58 | 7 | 30 | 40 | 0 | 122 | 11 | 5 | 16 | 3 | 17 | 1 | | | | | 13 | 50 | 2 | 51 | 1 | | | 0 | 0 |
| 8 | 1 | 62 | 26 | 17 | 56 | 15 | 29 | 12 | 82 | 7 | 49 | 0 | 0 | 4 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 8 | 29 | 62 | 26 | 22 | 56 | 10 | 28 | 10 | 82 | 9 | 49 | 0 | 0 | 92 | 11 | 5 | | | | | | | | | 33 | 50 | 3 | 51 | 2 | 52 | 1 | 0 | 0 |
| 9 | 5 | 62 | 28 | 17 | 58 | 11 | 56 | 11 | 26 | 11 | 50 | 0 | 0 | 90 | 11 | 4 | 17 | 2 | | | | | | | 9 | 50 | 2 | 51 | 1 | | | 3 | 0 |
| 9 | 19 | 62 | 29 | 35 | 56 | 14 | 19 | 7 | 58 | 5 | 39 | 0 | 0 | 64 | 11 | 4 | 22 | 1 | | | | | | | 9 | | | | | | | 0 | 0 |

*(Parts per billion)*

**STATION LOCATION** HUDSON RIVER BELOW

POUGHKEEPSIE, NEW YORK

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOS |
| 11 | 1 | 61 | 11 | 13 | 6394 | 167 | 64 | 103 | 2 | 12 | 22 | 2 | 2 | 16 | 2 | 9 | 6 | 1 | 1 |
| 1 | 3 | 62 | 1 | 15 | 7065 | 181 | 68 | 113 | 2 | 13 | 27 | 3 | 3 | 19 | 2 | 10 | 5 | 1 | 1 |
| 2 | 7 | 62 | 2 | 15 | 5182 | 228 | 83 | 145 | 3 | 15 | 32 | 3 | 3 | 24 | 2 | 13 | 6 | 2 | 1 |
| 3 | 14 | 62 | 3 | 23 | 5888 | 240 | 106 | 134 | 3 | 21 | 42 | 5 | 4 | 26 | 7 | 15 | 9 | 2 | 1 |
| 5 | 2 | 62 | 5 | 10 | 5066 | 157 | 90 | 67 | 5 | 24 | 27 | 3 | 2 | 20 | 2 | 10 | 7 | 1 | 1 |
| 6 | 6 | 62 | 6 | 18 | 5192 | 204 | 99 | 105 | 1 | 22 | 28 | 3 | 3 | 21 | 1 | 13 | 10 | 1 | 2 |
| 8 | 1 | 62 | 8 | 12 | 5251 | 209 | 87 | 122 | 2 | 19 | 24 | 3 | 2 | 18 | 1 | 17 | 9 | 2 | 1 |
| 9 | 5 | 62 | 9 | 17 | 7121 | 182 | 73 | 109 | 2 | 15 | 25 | 2 | 2 | 20 | 1 | 12 | 8 | 2 | |

**MINOR BASIN** LOWER HUDSON RIVER

**STATION LOCATION** HUDSON RIVER BELOW

POUGHKEEPSIE, NEW YORK 18

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 4 | 61 | 21.0 | 6.0 | 7.3 | .7 | 11 | .3 | 2.0 | .1 | 6 | 46 | 87 | 25 | 10 | 23 | - | - | 12000 |
| 10 | 11 | 61 | 21.0 | 6.0 | 7.3 | - | 11 | - | - | .1 | 6 | 45 | 85 | 25 | 32 | 50 | - | - | 2800 |
| 11 | 1 | 61 | 15.7 | 8.2 | 7.2 | 1.3 | 11 | .2 | 2.0 | .1 | 8 | 40 | 83 | 23 | 22 | 45 | .0 | 136 | 1900 |
| 11 | 8 | 61 | 14.2 | 8.2 | 7.4 | 1.8 | 11 | .3 | 2.3 | .1 | 6 | 37 | 80 | 25 | 42 | - | .0 | 133 | 2500 |
| 11 | 15 | 61 | 22.6 | 8.2 | 7.4 | - | 11 | - | - | .1 | 6 | 40 | 85 | 25 | 40 | - | .0 | - | 2000 |
| 12 | 13 | 61 | 5.6 | 10.2 | 7.3 | - | - | - | - | .1 | 6 | 43 | 81 | 25 | 110 | 50 | - | - | 1100 |
| 12 | 20 | 61 | 4.0 | 10.6 | 7.4 | - | 17 | 1.2 | 4.7 | .3 | 6 | 38 | 82 | 25 | 70 | 50 | - | - | - |
| 1 | 3 | 62 | .8 | 11.4 | 7.5 | - | 30 | 1.2 | 4.5 | .3 | 6 | 46 | 89 | 18 | 22 | 50 | .0 | - | 820 |
| 1 | 24 | 62 | 1.2 | 10.1 | 7.1 | 3.0 | 35 | 1.3 | - | .3 | 6 | 41 | 81 | 25 | 13 | 40 | - | - | 1100 |
| 1 | 31 | 62 | .6 | 10.2 | 7.1 | 2.1 | 35 | 1.1 | - | .3 | 8 | 42 | 83 | 25 | 10 | 50 | .0 | - | 3500 |
| 2 | 7 | 62 | .6 | 10.2 | 7.1 | - | 23 | .6 | 3.1 | .2 | 8 | 42 | 74 | 25 | 18 | 31 | .0 | - | 1500 |
| 2 | 14 | 62 | .6 | - | 7.1 | - | 25 | .6 | 3.3 | .2 | 6 | 44 | 74 | 25 | 12 | 30 | .0 | - | 1200 |
| 2 | 28 | 62 | .8 | 9.5 | 7.3 | 2.9 | 25 | 1.1 | - | .3 | 8 | 50 | 76 | 18 | 13 | 30 | - | - | 1100 |
| 3 | 7 | 62 | 1.0 | - | 7.2 | - | 18 | - | - | .2 | 6 | 44 | 68 | 25 | 19 | 40 | - | - | 400 |
| 3 | 14 | 62 | 1.0 | 8.0 | 7.1 | 3.2 | 21 | .4 | - | .3 | 6 | 47 | 82 | 25 | 18 | 40 | .0 | 169 | 2400 |
| 3 | 28 | 62 | 4.2 | 10.6 | 7.2 | - | 20 | .6 | - | .3 | 6 | 41 | 70 | 25 | 27 | 27 | - | - | 700 |
| 4 | 4 | 62 | 6.0 | 10.4 | 7.2 | - | 16 | .5 | 3.0 | .3 | 3 | 45 | 71 | 12 | 70 | 30 | - | - | 1000 |
| 4 | 11 | 62 | 6.4 | 11.0 | 7.2 | 1.6 | 15 | .5 | - | .1 | 2 | 35 | 64 | 18 | 42 | 30 | - | 113 | 900 |
| 4 | 18 | 62 | 6.8 | 10.8 | 7.2 | - | 13 | .6 | - | .1 | 1 | 28 | 48 | 18 | 40 | 30 | .0 | 90 | 2900 |
| 4 | 25 | 62 | 8.7 | 10.3 | 7.4 | 2.4 | 11 | .3 | 3.1 | .1 | 2 | 38 | 57 | 18 | 22 | 30 | - | 91 | 500 |
| 5 | 2 | 62 | 12.1 | 9.2 | 7.3 | - | 14 | 1.0 | - | .1 | 3 | 40 | 65 | 18 | 17 | 30 | - | - | *22 |
| 5 | 9 | 62 | 13.5 | 6.8 | 7.3 | - | 14 | .7 | - | .1 | 3 | 44 | 68 | 15 | 30 | 25 | - | - | 710 |
| 5 | 16 | 62 | 14.2 | 7.5 | 7.2 | - | 11 | .3 | - | .2 | 2 | 32 | 47 | 18 | 17 | 23 | - | - | 2800 |
| 5 | 23 | 62 | 16.5 | 6.4 | 7.2 | - | 10 | .8 | - | .1 | 6 | 36 | 56 | 18 | 17 | 25 | - | - | 1200 |
| 6 | 6 | 62 | 19.7 | 5.7 | 7.3 | - | - | .3 | 1.6 | - | 2 | 37 | 56 | - | 25 | 30 | .0 | 90 | - |
| 6 | 13 | 62 | 20.9 | 6.0 | 7.4 | - | - | .6 | - | .2 | 4 | 38 | 57 | 18 | 25 | 25 | - | - | 2700 |
| 6 | 20 | 62 | 22.5 | 5.5 | 7.3 | 1.2 | 12 | .2 | 2.3 | .1 | 6 | 43 | 64 | 18 | 20 | 30 | - | - | 720 |
| 6 | 27 | 62 | 22.7 | - | 7.2 | - | 10 | - | - | .1 | 6 | 40 | 53 | 18 | 28 | 30 | - | - | 1800 |
| 7 | 11 | 62 | 24.3 | 4.4 | 7.3 | - | - | - | - | .1 | 6 | 45 | 70 | 18 | 11 | 23 | - | - | 4000 |
| 8 | 1 | 62 | 24.0 | 5.3 | 7.4 | .8 | - | .4 | 2.0 | .2 | 8 | 45 | 74 | 23 | 18 | 23 | .0 | 113 | 9600 |
| 8 | 8 | 62 | 24.5 | 4.9 | 7.4 | - | 30 | .6 | 3.0 | .1 | 16 | 50 | 78 | 25 | 25 | 30 | - | - | 2400 |
| 8 | 15 | 62 | 23.5 | 5.0 | 7.4 | - | 28 | .7 | 3.0 | .1 | 16 | 50 | 78 | 25 | 24 | - | - | - | 6000 |
| 8 | 29 | 62 | 23.6 | 5.8 | 7.4 | - | 27 | .8 | 2.9 | .1 | 12 | 50 | 77 | 25 | 28 | 25 | .0 | 145 | - |
| 9 | 5 | 62 | 23.6 | 5.7 | 7.5 | - | 30 | .8 | - | .1 | 16 | 50 | 80 | 25 | 23 | 35 | .0 | - | 3600 |
| 9 | 12 | 62 | 22.7 | 6.0 | 7.4 | 1.0 | 29 | .9 | 2.7 | .1 | 12 | 44 | 80 | 25 | 32 | 35 | - | - | 11000 |
| 9 | 19 | 62 | 21.7 | 6.0 | 7.5 | - | 29 | .7 | 2.2 | .1 | 16 | 42 | 80 | 25 | 28 | 35 | .1 | - | 3600 |
| 9 | 26 | 62 | 20.3 | 6.4 | 7.5 | .8 | 28 | .9 | - | .1 | 16 | 42 | 78 | 25 | 35 | 35 | - | - | 6800 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Green Island, New York
Operated by U.S. Geological Survey

STATE New York

MAJOR BASIN Northeast

MINOR BASIN Lower Hudson River

STATION LOCATION Hudson River below

Poughkeepsie, New York

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.220 | 5.740 | 7.180 | 3.310 | 9.040 | 8.800 | 79.800 | 48.200 | 7.480 | 2.560 | 5.410 | 3.660 |
| 2 | 2.880 | 5.640 | 6.240 | 3.930 | 8.790 | 9.450 | 78.800 | 38.000 | 6.640 | 2.000 | 5.680 | 2.530 |
| 3 | 4.990 | 5.930 | 5.030 | 6.200 | 7.440 | 10.000 | 51.600 | 31.900 | 4.290 | 3.860 | 5.920 | 1.300 |
| 4 | 5.740 | 5.130 | 6.430 | 6.660 | 8.100 | 9.040 | 38.000 | 28.300 | 3.070 | 1.710 | 3.530 | 1.740 |
| 5 | 6.180 | 4.510 | 11.400 | 7.070 | 7.370 | 6.930 | 30.800 | 24.300 | 5.410 | 1.950 | 2.490 | 2.970 |
| 6 | 6.120 | 5.210 | 15.300 | 5.880 | 8.880 | 8.250 | 26.800 | 22.500 | 6.500 | 3.540 | 1.990 | 4.830 |
| 7 | 5.350 | 7.990 | 15.700 | 9.040 | 10.600 | 8.400 | 30.300 | 21.300 | 7.410 | 2.810 | 4.540 | 4.120 |
| 8 | 3.580 | 7.980 | 13.500 | 14.500 | 10.500 | 8.030 | 63.900 | 18.900 | 6.700 | 2.460 | 8.510 | 4.120 |
| 9 | 3.660 | 7.250 | 11.900 | 18.400 | 9.200 | 8.560 | 64.800 | 16.500 | 5.080 | 2.120 | 7.110 | 2.740 |
| 10 | 5.130 | 6.370 | 8.830 | 13.800 | 8.170 | 7.280 | 53.000 | 15.800 | 3.450 | 4.760 | 6.970 | 2.600 |
| 11 | 5.030 | 4.550 | 6.430 | 10.200 | 6.730 | 7.650 | 45.400 | 13.700 | 3.330 | 4.420 | 8.680 | 3.720 |
| 12 | 4.940 | 3.860 | 7.840 | 9.200 | 4.900 | 6.800 | 36.000 | 9.760 | 4.880 | 3.860 | 5.920 | 4.510 |
| 13 | 5.240 | 3.250 | 8.660 | 7.440 | 6.530 | 11.800 | 29.000 | 9.490 | 5.190 | 4.140 | 4.420 | 4.550 |
| 14 | 4.780 | 5.920 | 8.400 | 7.140 | 6.600 | 16.100 | 39.000 | 8.370 | 5.510 | 2.810 | 5.620 | 4.740 |
| 15 | 4.290 | 5.510 | 8.640 | 6.560 | 6.600 | 17.100 | 36.900 | 10.600 | 5.410 | 2.700 | 5.570 | 4.200 |
| 16 | 4.510 | 5.990 | 6.600 | 14.800 | 7.880 | 16.600 | 29.500 | 12.400 | 4.510 | 2.120 | 5.350 | 2.490 |
| 17 | 4.640 | 6.970 | 5.090 | 19.000 | 6.930 | 17.100 | 26.400 | 12.100 | 3.150 | 3.530 | 5.410 | 2.230 |
| 18 | 4.880 | 8.680 | 4.320 | 13.800 | 6.140 | 17.400 | 21.900 | 12.400 | 2.880 | 4.120 | 4.880 | 4.290 |
| 19 | 5.130 | 7.040 | 6.880 | 11.500 | 4.900 | 17.100 | 18.600 | 10.800 | 4.470 | 4.460 | 2.740 | 5.240 |
| 20 | 5.130 | 5.970 | 9.040 | 11.000 | 6.600 | 19.400 | 18.900 | 8.760 | 4.460 | 4.550 | 2.850 | 4.880 |
| 21 | 4.380 | 6.370 | 9.040 | 10.100 | 6.260 | 22.900 | 17.700 | 8.070 | 4.610 | 3.290 | 4.640 | 4.830 |
| 22 | 3.290 | 6.180 | 8.880 | 8.720 | 7.140 | 22.900 | 16.700 | 9.410 | 5.030 | 2.530 | 4.510 | 4.200 |
| 23 | 2.630 | 5.990 | 8.400 | 10.600 | 6.930 | 28.500 | 18.500 | 9.570 | 1.720 | 2.230 | 4.380 | 2.630 |
| 24 | 4.200 | 6.760 | 7.440 | 10.800 | 7.210 | 27.700 | 27.600 | 8.440 | 3.000 | 4.970 | 3.860 | 2.440 |
| 25 | 4.830 | 13.500 | 4.550 | 10.800 | 6.660 | 25.500 | 27.400 | 7.990 | 3.990 | 4.880 | 3.140 | 3.920 |
| 26 | 4.880 | 12.000 | 4.530 | 10.200 | 4.920 | 24.400 | 23.800 | 8.370 | 5.670 | 4.740 | 2.230 | 4.640 |
| 27 | 5.740 | 7.020 | 6.730 | 12.400 | 7.040 | 25.100 | 19.400 | 6.970 | 4.990 | 4.620 | 2.230 | 5.010 |
| 28 | 3.410 | 9.320 | 7.800 | 14.200 | 8.250 | 25.900 | 20.100 | 5.740 | 4.950 | 3.410 | 3.650 | 6.000 |
| 29 | 3.290 | 7.690 | 7.650 | 11.100 |  | 25.800 | 21.200 | 7.040 | 4.600 | 2.600 | 4.640 | 5.350 |
| 30 | 3.950 | 6.900 | 7.010 | 10.400 |  | 31.300 | 31.900 | 6.060 | 3.780 | 2.630 | 4.970 | 3.890 |
| 31 | 4.640 |  | 5.350 | 9.960 |  | 43.100 |  | 5.860 |  | 4.880 | 4.860 |  |

*RESULTS IN MICROGRAMS PER LITER*
(*Parts per billion*)

**STATION LOCATION** ILLINOIS RIVER NEAR
GRAFTON, ILLINOIS 98

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 12 | 1 | 61 | 12 | 17 | 4950 | 213 | 72 | 141 | 2 | 18 | 26 | 2 | 2 | 22 | 0 | 7 | 5 | 2 | 12 |
| 1 | 1 | 62 | 1 | 8 | 70 | * | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 23 | 62 | 9 | 16 | 3470 | 264 | 88 | 176 | 1 | 16 | 34 | 1 | 1 | 30 | 2 | 13 | 8 | 2 | 14 |

* LOW FLOW - NOT PROCESSED

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** ILLINOIS RIVER

**STATION LOCATION** ILLINOIS RIVER NEAR
GRAFTON, ILLINOIS

98

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 18 | 61 | 11 | 1 | 0 | 1 | 2 | 2 | 2 | 2 | 0 | 8 | 17 | 11 | 17 | 14 | | | | | | |
| 11 | 26 | 61 | 12 | 6 | 5 | 7 | 1 | 2 | 6 | 7 | 179 | 19 | 55 | 11 | 234 | 22 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | 26 | 16 | 0 | 2 | 26 | 16 | 95 | 28 | 31 | 14 | 126 | 31 | | | | | | |
| 12 | 11 | 61 | 12 | 19 | - | - | - | - | - | - | 31 | 9 | 11 | 7 | 42 | 11 | | | | | | |
| 12 | 18 | 61 | 1 | 2 | 1 | 3 | 1 | 2 | 2 | 4 | 37 | 13 | 31 | 11 | 68 | 17 | | | | | | |
| 12 | 26 | 61 | 1 | 5 | 7 | 6 | 2 | 2 | 9 | 6 | 62 | 16 | 29 | 11 | 91 | 27 | | | | | | |
| 1 | 2 | 62 | 1 | 12 | 16 | 8 | 1 | 2 | 17 | 8 | 28 | 16 | 31 | 11 | 59 | 19 | | | | | | |
| 1 | 8 | 62 | 1 | 18 | 1 | 1 | 1 | 2 | 2 | 2 | 74 | 11 | 46 | 11 | 120 | 15 | | | | | | |
| 1 | 15 | 62 | 1 | 26 | 0 | 1 | 0 | 2 | 0 | 2 | 27 | 8 | 53 | 11 | 80 | 14 | | | | | | |
| 1 | 22 | 62 | 1 | 30 | 1 | 2 | 1 | 3 | 2 | 4 | 12 | 9 | 41 | 12 | 53 | 15 | | | | | | |
| 2 | 5 | 62 | 2 | 14 | 6 | 4 | 0 | 2 | 6 | 4 | 78 | 14 | 43 | 11 | 121 | 18 | | | | | | |
| 2 | 12 | 62 | 2 | 26 | 0 | 1 | 0 | 2 | 0 | 2 | 73 | 9 | 54 | 11 | 127 | 14 | | | | | | |
| 2 | 18 | 62 | 3 | 6 | 1 | 1 | 3 | 2 | 4 | 2 | 42 | 12 | 52 | 15 | 94 | 19 | | | | | | |
| 2 | 26 | 62 | 3 | 14 | 1 | 1 | 1 | 2 | 2 | 2 | 66 | 6 | 54 | 7 | 120 | 9 | | | | | | |
| 3 | 5 | 62 | 3 | 16 | 1 | 2 | 1 | 2 | 2 | 3 | 84 | 14 | 46 | 14 | 130 | 20 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | 0 | 1 | 0 | 2 | 0 | 2 | 85 | 11 | 67 | 12 | 152 | 16 | | | | | | |
| 3 | 19 | 62 | 3 | 30 | 0 | 1 | 0 | 2 | 0 | 2 | 49 | 9 | 61 | 11 | 110 | 14 | | | | | | |
| 3 | 26 | 62 | 4 | 6 | 4 | 6 | 0 | 1 | 4 | 6 | 300 | 29 | 79 | 6 | 379 | 30 | | | | | | |
| 4 | 2 | 62 | 4 | 13 | 13 | 14 | 0 | 2 | 13 | 14 | 110 | 39 | 57 | 7 | 167 | 40 | | | | | | |
| 4 | 9 | 62 | 4 | 24 | 0 | 1 | 0 | 1 | 0 | 1 | 24 | 8 | 56 | 11 | 80 | 14 | | | | | | |
| 4 | 16 | 62 | 5 | 23 | 0 | 1 | 1 | 2 | 1 | 2 | 8 | 11 | 31 | 13 | 39 | 17 | | | | | | |
| 4 | 23 | 62 | 5 | 25 | 0 | 1 | 0 | 1 | 0 | 1 | 14 | 14 | 56 | 17 | 70 | 22 | | | | | | |
| 4 | 30 | 62 | 6 | 4 | 0 | 1 | 0 | 2 | 0 | 2 | 17 | 10 | 30 | 13 | 47 | 16 | | | | | | |
| 5 | 7 | 62 | 6 | 8 | 4 | 3 | 2 | 2 | 6 | 4 | 35 | 19 | 24 | 17 | 59 | 25 | | | | | | |
| 5 | 14 | 62 | 6 | 21 | 0 | 1 | 2 | 2 | 2 | 2 | 0 | 24 | 11 | 13 | 11 | 27 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | 0 | 1 | 2 | 2 | 2 | 2 | 11 | 11 | 35 | 13 | 46 | 17 | | | | | | |
| 5 | 28 | 62 | 7 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 10 | 11 | 47 | 15 | 57 | 19 | | | | | | |
| 6 | 4 | 62 | 7 | 3 | 0 | 1 | 0 | 2 | 0 | 2 | 8 | 11 | 50 | 17 | 58 | 20 | | | | | | |
| 6 | 11 | 62 | 7 | 13 | 1 | 1 | 3 | 2 | 4 | 2 | 16 | 7 | 18 | 5 | 34 | 9 | | | | | | |
| 6 | 18 | 62 | 7 | 13 | 0 | 1 | 0 | 3 | 0 | 3 | 5 | 6 | 25 | 9 | 30 | 11 | | | | | | |
| 6 | 25 | 62 | 7 | 23 | 1 | 1 | 1 | 2 | 2 | 2 | 18 | 11 | 28 | 14 | 46 | 18 | | | | | | |
| 7 | 2 | 62 | 7 | 24 | 1 | 1 | 2 | 1 | 3 | 1 | 6 | 11 | 30 | 14 | 36 | 18 | | | | | | |
| 7 | 10 | 62 | 8 | 6 | 0 | 0 | 2 | 2 | 2 | 2 | 8 | 7 | 36 | 11 | 44 | 13 | | | | | | |
| 7 | 17 | 62 | 10 | 7 | 0 | 2 | 0 | 2 | 0 | 3 | 4 | 10 | 12 | 14 | 16 | 17 | | | | | | |
| 7 | 23 | 62 | 8 | 20 | 0 | 1 | 1 | 1 | 1 | 1 | 9 | 5 | 19 | 6 | 28 | 7 | | | | | | |
| 7 | 30 | 62 | 8 | 22 | 0 | 1 | 0 | 2 | 0 | 2 | 6 | 11 | 36 | 14 | 42 | 18 | | | | | | |
| 8 | 6 | 62 | 8 | 28 | 0 | 1 | 0 | 1 | 0 | 1 | 9 | 10 | 37 | 14 | 46 | 17 | | | | | | |
| 8 | 13 | 62 | 8 | 31 | 1 | 1 | 0 | 2 | 1 | 2 | 3 | 11 | 23 | 14 | 26 | 18 | | | | | | |
| 8 | 20 | 62 | 9 | 5 | 0 | 1 | 2 | 2 | 2 | 2 | 3 | 11 | 36 | 15 | 39 | 19 | | | | | | |
| 8 | 27 | 62 | 9 | 17 | 1 | 1 | 0 | 1 | 1 | 1 | 7 | 11 | 25 | 14 | 32 | 18 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** ILLINOIS
**MAJOR BASIN** UPPER MISSISSIPPI RIVER
**MINOR BASIN** ILLINOIS RIVER
**STATION LOCATION** ILLINOIS RIVER NEAR
GRAFTON, ILLINOIS 98

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | | | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 9 | 4 | 62 | 9 | 19 | 0 | 1 | 1 | 2 | 1 | 2 | 27 | 10 | 25 | 13 | 52 | 16 | | | | | | | | |
| 9 | 10 | 62 | 10 | 9 | - | - | - | - | - | - | 8 | 7 | 22 | 9 | 30 | 11 | | | | | | | | |
| 9 | 17 | 62 | 10 | 10 | 2 | 2 | 2 | 2 | 4 | 3 | 13 | 26 | 30 | 15 | 43 | 30 | | | | | | | | |
| 9 | 24 | 62 | 10 | 19 | 1 | 1 | 0 | 0 | 1 | 1 | 7 | 8 | 14 | 9 | 21 | 12 | | | | | | | | |

**STATION LOCATION** ILLINOIS RIVER NEAR
GRAFTON, ILLINOIS 98

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 18 | 61 | 2700 | 0 | 0 | 350 | 20 | 310 | 20 | 1840 | 190 | 310 | 150 | 71 | 3 | 69 | 2 | 68 | 2 | 51 | 1 | | | | | | | | | | | | |
| 12 | 4 | 61 | 7800 | 140 | 110 | 480 | 0 | 560 | 200 | 5900 | 380 | 1780 | 650 | 71 | 6 | 51 | 2 | 60 | 1 | 25 | 1 | 57 | 1 | | | | | | | | | | |
| 12 | 10 | 61 | 10500 | 90 | 180 | 410 | 0 | 380 | 0 | 8730 | 680 | 2630 | 680 | 71 | 3 | 67 | 1 | 69 | 1 | 12 | 1 | 68 | 1 | 51 | 1 | | | | | | | | |
| 12 | 26 | 61 | 6900 | 0 | 0 | 200 | 0 | 320 | 0 | 5920 | 430 | 560 | 0 | 71 | 6 | 57 | 1 | 68 | 1 | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 6100 | 0 | 20 | 20 | 0 | 680 | 20 | 5110 | 200 | 250 | 50 | 71 | 6 | 51 | 2 | 57 | 1 | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 3700 | 0 | 0 | 40 | 0 | 2880 | 0 | 750 | 0 | 0 | 0 | 71 | 1 | 69 | 1 | 68 | 1 | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 1500 | 0 | 0 | 40 | 0 | 410 | 0 | 700 | 370 | 80 | 190 | 71 | 2 | 57 | 2 | | | | | | | | | | | | | | | | |
| 2 | 18 | 62 | 14300 | 600 | 0 | 20 | 0 | 8510 | 310 | 4040 | 870 | 100 | 100 | 57 | 6 | 71 | 5 | 68 | 4 | 51 | 3 | 91 | 2 | 3 | 2 | 60 | 1 | 92 | 1 | | | | |
| 3 | 5 | 62 | 8400 | 20 | 0 | 20 | 20 | 3180 | 0 | 3730 | 1470 | 90 | 90 | 57 | 5 | 88 | 3 | 91 | 3 | 51 | 2 | 87 | 1 | | | | | | | | | | |
| 3 | 19 | 62 | 18000 | 0 | 0 | 250 | 0 | 780 | 340 | 16440 | 200 | 310 | 90 | 71 | 7 | 57 | 2 | 63 | 2 | 51 | 1 | 25 | 1 | | | | | | | | | | |
| 4 | 2 | 62 | 700 | 0 | 0 | 70 | 0 | 180 | 50 | 360 | 50 | 110 | 50 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 34500 | 0 | 50 | 1200 | 0 | 3940 | 2220 | 14260 | 12790 | 2190 | 950 | 71 | 7 | 92 | 6 | 60 | 4 | 51 | 4 | 57 | 4 | 25 | 3 | 88 | 3 | 68 | 3 | 69 | 2 | 52 | 2 |
| 5 | 7 | 62 | 14900 | 0 | 0 | 320 | * | 2510 | 320 | 7720 | 2070 | 3290 | 1520 | 71 | 6 | 50 | 4 | 52 | 4 | 68 | 4 | 92 | 3 | 57 | 3 | 88 | 2 | 60 | 2 | 38 | 1 | 91 | 1 |
| 5 | 21 | 62 | 22200 | 120 | 0 | 750 | * | 3100 | 170 | 5630 | 210 | 580 | 120 | 50 | 7 | 68 | 5 | 71 | 5 | 51 | 4 | 57 | 3 | 59 | 2 | 24 | 1 | 56 | 1 | 69 | 1 | 60 | 1 |
| 6 | 4 | 62 | 2100 | 20 | 90 | 270 | 0 | 930 | 20 | 680 | 70 | 180 | 20 | 51 | 2 | 71 | 2 | 57 | 2 | 68 | 1 | 69 | 1 | | | | | | | | | | |
| 6 | 18 | 62 | 5500 | 100 | 0 | 480 | 20 | 2110 | 0 | 830 | 1950 | 120 | 460 | 51 | 4 | 87 | 2 | 79 | 2 | 88 | 2 | 68 | 2 | 71 | 2 | 85 | 2 | 59 | 1 | | | | |
| 7 | 2 | 67 | 12100 | 250 | 0 | 1490 | 0 | 6420 | 0 | 3520 | 370 | 410 | 0 | 51 | 5 | 67 | 5 | 59 | 4 | 52 | 3 | 54 | 3 | 68 | 2 | 69 | 2 | 38 | 2 | 24 | 1 | | |
| 7 | 16 | 62 | 3300 | 0 | 40 | 870 | 0 | 370 | 20 | 750 | 1240 | 170 | 210 | 67 | 2 | 51 | 1 | 30 | 1 | 69 | 1 | | | | | | | | | | | | |
| 8 | 6 | 62 | 900 | 100 | 0 | 170 | 0 | 170 | 20 | 410 | 0 | 120 | 0 | 51 | 1 | 69 | 1 | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 3100 | 170 | 0 | 270 | 0 | 1740 | 20 | 290 | 620 | 330 | 40 | 51 | 4 | 52 | 2 | 87 | 1 | 88 | 1 | 67 | 1 | | | | | | | | | | |
| 9 | 4 | 62 | 3000 | 40 | 0 | 250 | 0 | 1760 | 0 | 210 | 750 | 40 | 120 | 51 | 3 | 52 | 2 | 88 | 2 | 87 | 1 | 57 | 1 | 56 | 1 | | | | | | | | |
| 9 | 17 | 62 | 500 | 10 | 0 | 70 | 0 | 30 | 0 | 90 | 300 | 70 | 310 | | | | | | | | | | | | | | | | | | | | |
| *5 | 7 | 62 | | | | | 1980 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| *5 | 21 | 62 | | | | | 12250 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | | | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | | |
| | | | | | | | | | | | | | | | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA Number per ml. | PROTOZOA (Identifiable) Number per ml. | NUMBER PER LITER | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | NUMBER PER LITER | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| 10 | 18 | 61 | 56 | 33 | 58 | 19 | 83 | 18 | 26 | 11 | 19 | 0 | 0 | 26 | 17 | 2 | 21 | 1 | | | | | | | 5 | 50 | 1 | | | | | 0 | 0 |
| 12 | 4 | 61 | 83 | 69 | 82 | 8 | 56 | 3 | 92 | 2 | 18 | 680 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 12 | 10 | 61 | 83 | 70 | 56 | 6 | 92 | 5 | 71 | 5 | 14 | 70 | 0 | 35 | 2 | 3 | | | | | | | | | 6 | 51 | 1 | | | | | 0 | 1 |
| 12 | 26 | 61 | 83 | 74 | 56 | 7 | 58 | 5 | 26 | 2 | 12 | 180 | 0 | 16 | 17 | 1 | | | | | | | | | 2 | | | | | | | 2 | 0 |
| 1 | 2 | 62 | 83 | 74 | 62 | 3 | 71 | 3 | 58 | 2 | 18 | 20 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 82 | 25 | 70 | 8 | 26 | 5 | 58 | 5 | 57 | 0 | 20 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 83 | 19 | 71 | 17 | 92 | 9 | 36 | 6 | 59 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 18 | 62 | 88 | 22 | 92 | 13 | 85 | 9 | 21 | 9 | 47 | 410 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 71 | 33 | 88 | 10 | 65 | 10 | 85 | 10 | 37 | 40 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 3 | 19 | 62 | 82 | 93 | 62 | 1 | 70 | 1 | 92 | 1 | 4 | 0 | 10 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 82 | 54 | 92 | 30 | 26 | 2 | 89 | 2 | 12 | 20 | 0 | 39 | 21 | 3 | 2 | 1 | 46 | 1 | | | | | 32 | 50 | 3 | 51 | 2 | 76 | 1 | 0 | 0 |
| 5 | 7 | 62 | 92 | 28 | 82 | 16 | 26 | 5 | 80 | 4 | 47 | 60 | 0 | 1 | | | | | | | | | | | 18 | 50 | 2 | 76 | 2 | | | 0 | 1 |
| 5 | 21 | 62 | 82 | 38 | 26 | 20 | 23 | 18 | 27 | 5 | 19 | 0 | 0 | 87 | 2 | 3 | 11 | 3 | 17 | 1 | 15 | 1 | | | 11 | 51 | 1 | 50 | 1 | 52 | 1 | 0 | 0 |
| 6 | 4 | 62 | 82 | 38 | 26 | 22 | 58 | 10 | 56 | 6 | 24 | 0 | 0 | 34 | 11 | 2 | 17 | 2 | 2 | 1 | | | | | 3 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 65 | 17 | 16 | 16 | 26 | 11 | 82 | 10 | 46 | 0 | 0 | 120 | 2 | 4 | 11 | 2 | 13 | 2 | | | | | 24 | 50 | 3 | 51 | 1 | | | 0 | 10 |
| 7 | 2 | 62 | 20 | 84 | 30 | 9 | 26 | 5 | 58 | 1 | 1 | 40 | 0 | 327 | 17 | 6 | 2 | 4 | 22 | 1 | 21 | 1 | 18 | 1 | 6 | 50 | 1 | | | | | 0 | 0 |
| 7 | 16 | 62 | 20 | 66 | 26 | 15 | 58 | 8 | 56 | 2 | 9 | 0 | 0 | 25 | 17 | 2 | 22 | 1 | | | | | | | 4 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 82 | 29 | 56 | 20 | 26 | 8 | 58 | 6 | 37 | 0 | 0 | 15 | 17 | 1 | 2 | 1 | | | | | | | 0 | | | | | | | 6 | 0 |
| 8 | 20 | 62 | 20 | 71 | 82 | 11 | 26 | 7 | 58 | 4 | 7 | 0 | 0 | 1060 | 17 | 7 | 2 | 6 | 18 | 5 | 21 | 4 | 22 | 3 | 42 | 50 | 4 | 76 | 2 | | | 0 | 0 |
| 9 | 4 | 62 | 20 | 43 | 26 | 21 | 82 | 21 | 56 | 8 | 7 | 0 | 0 | 467 | 17 | 6 | 2 | 4 | 15 | 3 | 22 | 2 | 18 | 1 | 30 | 50 | 4 | 76 | 2 | 51 | 1 | 0 | 1 |
| 9 | 17 | 62 | 20 | 19 | 53 | 16 | 18 | 12 | 65 | 8 | 45 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

STATION LOCATION ILLINOIS RIVER NEAR
GRAFTON, ILLINOIS

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | |
| 12 | 4 | 61 | - | - | - | - | - | - | - | - | 18 | 216 | 312 | - | 300 | 98 | .7 |
| 12 | 10 | 61 | - | - | 7.5 | - | - | - | - | - | 17 | 228 | 312 | 10 | 150 | 85 | .3 |
| 12 | 18 | 61 | - | - | - | - | 34 | - | - | - | 24 | 440 | 340 | - | 160 | 112 | 1.0 |
| 12 | 26 | 61 | - | - | - | - | - | - | - | - | 26 | 204 | 312 | - | 235 | 128 | - |
| 1 | 2 | 62 | - | - | 7.6 | - | - | - | - | - | 28 | 216 | 320 | 5 | 150 | 100 | .9 |
| 1 | 8 | 62 | - | - | 7.4 | - | - | - | - | - | 21 | 180 | 272 | 5 | 125 | 80 | .4 |
| 1 | 15 | 62 | - | - | 7.3 | - | - | - | - | - | 21 | 216 | 308 | 5 | 25 | 85 | .1 |
| 1 | 22 | 62 | - | - | 7.4 | - | - | - | - | - | 20 | 232 | 323 | 5 | 45 | 85 | .5 |
| 2 | 5 | 62 | - | - | - | - | - | - | - | - | 21 | - | 256 | - | - | 75 | .5 |
| 2 | 12 | 62 | - | - | - | - | - | - | - | - | 18 | 152 | 248 | 5 | - | 70 | .2 |
| 2 | 18 | 62 | - | - | - | - | - | - | - | - | 18 | 180 | 256 | - | 0 | 65 | .2 |
| 3 | 12 | 62 | - | - | - | - | - | - | - | - | 22 | 172 | 276 | 5 | 150 | 90 | - |
| 3 | 19 | 62 | - | - | 7.3 | - | - | - | - | - | 19 | 170 | 244 | 10 | 60 | 66 | .0 |
| 4 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 65 | .8 |
| 4 | 9 | 62 | - | - | 8.0 | - | - | - | - | - | 10 | 168 | 236 | 10 | - | 65 | .4 |
| 4 | 16 | 62 | - | - | 7.6 | - | - | - | - | - | 17 | 174 | 244 | 20 | 100 | 68 | .1 |
| 4 | 23 | 62 | - | - | - | - | - | - | - | - | 17 | 188 | 272 | 10 | 55 | 85 | .0 |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | 9 | 264 | 320 | 10 | 25 | 60 | .9 |
| 5 | 7 | 62 | - | - | - | - | - | - | - | - | 20 | 208 | 276 | 15 | 108 | 85 | .0 |
| 5 | 14 | 62 | - | - | 8.0 | - | - | - | - | - | 9 | 254 | 300 | 5 | 38 | 86 | .0 |
| 5 | 21 | 62 | - | - | - | - | - | - | - | - | 15 | 186 | 244 | - | 0 | 76 | - |
| 5 | 28 | 62 | - | - | - | - | - | - | - | - | 20 | 200 | 336 | 15 | *25 | 75 | .0 |
| 6 | 4 | 62 | - | - | 8.0 | - | - | - | - | - | 18 | 186 | 244 | 10 | 25 | 75 | .0 |
| 6 | 18 | 62 | - | - | - | - | - | - | - | - | 18 | 176 | 236 | 20 | 25 | 65 | .1 |
| 6 | 25 | 62 | - | - | - | - | - | - | - | - | 18 | 192 | 264 | 10 | *25 | 65 | .2 |
| 7 | 2 | 62 | - | - | 7.9 | - | - | - | - | - | 18 | 190 | 280 | 10 | *25 | 85 | .6 |
| 7 | 10 | 62 | - | - | - | - | - | - | - | - | 12 | 146 | 208 | 10 | *25 | - | - |
| 7 | 23 | 62 | - | - | - | - | - | - | - | - | 19 | 152 | 216 | 10 | 25 | 65 | .0 |
| 7 | 30 | 62 | - | - | - | - | - | - | - | - | 21 | 168 | 260 | 5 | 25 | 65 | .2 |
| 8 | 6 | 62 | - | - | 7.9 | - | - | - | - | - | 21 | 180 | 240 | 5 | *25 | 60 | - |
| 8 | 13 | 62 | - | - | - | - | - | - | - | - | 24 | 180 | 260 | 15 | 80 | 75 | .0 |
| 8 | 20 | 62 | - | - | - | - | - | - | - | - | 23 | 168 | 240 | 5 | - | 75 | .1 |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | 32 | 160 | 236 | 5 | 83 | 80 | .3 |
| 9 | 4 | 62 | - | - | 7.6 | - | - | - | - | - | 20 | 160 | 220 | 10 | 25 | 85 | .0 |
| 9 | 10 | 62 | - | - | - | - | - | - | - | - | 30 | 144 | - | 5 | 63 | 85 | .1 |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | 32 | 152 | 212 | 10 | 105 | 85 | .2 |
| 9 | 24 | 62 | - | - | 8.2 | - | - | - | - | - | 23 | 156 | 216 | 5 | 55 | 100 | .1 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Meredosia, Illinois
Operated by U.S. Geological Survey

MAJOR BASIN Upper Mississippi River

MINOR BASIN Illinois River

STATION LOCATION Illinois River near
Grafton, Illinois

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 52.800 | 21.800 | 29.400 | 13.000 | 22.000 | 35.800 | 85.000 | 29.100 | 25.900 | 8.220 | 11.600 | 6.840 |
| 2 | 52.400 | 23.900 | 28.600 | 12.000 | 25.000 | 34.900 | 84.600 | 28.100 | 24.900 | 9.050 | 10.000 | 6.990 |
| 3 | 51.000 | 24.400 | 27.800 | 13.000 | 28.000 | 33.800 | 79.800 | 28.400 | 23.400 | 8.790 | 9.940 | 7.400 |
| 4 | 49.100 | 26.600 | 27.000 | 12.500 | 30.000 | 33.800 | 78.300 | 27.700 | 18.800 | 12.000 | 9.150 | 8.100 |
| 5 | 47.300 | 26.900 | 26.600 | 13.000 | 35.000 | 35.000 | 75.300 | 28.400 | 20.000 | 13.000 | 9.350 | 7.640 |
| 6 | 46.200 | 27.300 | 25.800 | 19.000 | 37.000 | 35.200 | 71.900 | 27.900 | 20.500 | 13.800 | 8.700 | 7.620 |
| 7 | 44.400 | 29.700 | 24.900 | 20.000 | 40.000 | 34.800 | 71.000 | 26.800 | 17.600 | 13.900 | 9.200 | 7.050 |
| 8 | 42.200 | 30.100 | 23.700 | 21.000 | 41.000 | 32.300 | 67.600 | 28.200 | 24.400 | 13.900 | 9.130 | 7.890 |
| 9 | 39.900 | 29.000 | 21.100 | 22.000 | 40.700 | 32.800 | 64.600 | 29.500 | 20.000 | 14.200 | 9.690 | 7.540 |
| 10 | 38.100 | 28.700 | 19.400 | 24.600 | 40.600 | 31.400 | 62.100 | 30.200 | 23.600 | 14.500 | 10.500 | 7.660 |
| 11 | 36.100 | 27.800 | 18.800 | 26.000 | 42.900 | 33.000 | 59.000 | 27.000 | 24.100 | 14.200 | 10.600 | 7.850 |
| 12 | 34.800 | 26.800 | 19.300 | 24.900 | 43.200 | 34.600 | 57.700 | 30.900 | 25.000 | 12.100 | 10.000 | 6.890 |
| 13 | 33.500 | 26.000 | 19.400 | 23.000 | 41.600 | 36.900 | 56.600 | 32.000 | 24.900 | 12.100 | 9.740 | 7.740 |
| 14 | 31.900 | 24.400 | 17.800 | 22.000 | 41.300 | 40.400 | 54.800 | 33.000 | 24.800 | 12.600 | 9.400 | 7.180 |
| 15 | 29.800 | 21.500 | 17.700 | 21.000 | 40.500 | 42.800 | 53.600 | 33.800 | 25.400 | 12.800 | 9.610 | 6.610 |
| 16 | 28.000 | 19.800 | 17.400 | 20.500 | 40.100 | 48.000 | 51.800 | 33.900 | 25.400 | 15.700 | 8.830 | 6.860 |
| 17 | 27.000 | 19.900 | 18.400 | 20.000 | 40.200 | 51.500 | 50.100 | 33.800 | 25.200 | 22.500 | 8.870 | 6.670 |
| 18 | 25.300 | 21.000 | 18.400 | 19.000 | 40.000 | 53.400 | 48.400 | 33.600 | 24.100 | 20.400 | 8.520 | 6.270 |
| 19 | 21.400 | 21.200 | 18.700 | 18.500 | 39.500 | 54.100 | 46.400 | 34.100 | 21.000 | 18.200 | 8.210 | 7.320 |
| 20 | 18.600 | 22.600 | 19.100 | 18.000 | 38.200 | 55.600 | 44.000 | 33.800 | 15.700 | 18.400 | 7.380 | 6.800 |
| 21 | 17.200 | 23.900 | 19.100 | 17.500 | 37.900 | 58.500 | 41.800 | 33.200 | 15.400 | 18.200 | 6.220 | 6.050 |
| 22 | 16.900 | 25.900 | 18.700 | 17.000 | 37.400 | 66.200 | 40.600 | 33.000 | 15.000 | 18.900 | 6.660 | 5.500 |
| 23 | 16.300 | 28.100 | 19.000 | 17.000 | 36.800 | 68.300 | 39.000 | 31.900 | 14.400 | 18.600 | 7.160 | 5.000 |
| 24 | 16.400 | 29.700 | 19.000 | 17.000 | 36.000 | 73.400 | 37.000 | 30.300 | 14.100 | 18.900 | 7.040 | 4.700 |
| 25 | 14.200 | 30.200 | 19.400 | 18.000 | 35.400 | 77.300 | 35.200 | 29.500 | 13.200 | 19.000 | 7.700 | 6.440 |
| 26 | 13.800 | 30.100 | 21.700 | 19.000 | 35.400 | 81.500 | 34.300 | 28.300 | 12.700 | 18.100 | 8.120 | 6.010 |
| 27 | 15.000 | 29.700 | 21.600 | 21.000 | 36.000 | 84.500 | 32.800 | 27.000 | 12.600 | 16.800 | 7.480 | 5.520 |
| 28 | 14.300 | 29.100 | 20.400 | 22.000 | 36.500 | 86.800 | 31.500 | 27.600 | 11.700 | 15.200 | 7.260 | 5.870 |
| 29 | 14.100 | 29.500 | 17.500 | 21.000 |  | 90.500 | 30.500 | 27.500 | 10.500 | 14.100 | 7.340 | 6.670 |
| 30 | 14.900 | 29.400 | 15.000 | 20.000 |  | 87.500 | 29.500 | 27.900 | 9.050 | 13.300 | 7.090 | 7.000 |
| 31 | 17.500 |  | 14.000 | 20.000 |  | 85.800 |  | 27.300 |  | 12.300 | 6.850 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

| | |
|---|---|
| **STATE** | ILLINOIS |
| **MAJOR BASIN** | UPPER MISSISSIPPI RIVER |
| **MINOR BASIN** | ILLINOIS RIVER |
| **STATION LOCATION** | ILLINOIS RIVER AT<br>PEORIA, ILLINOIS |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± |
| 10 | 2 | 61 | 10 | 13 | - | - | - | - | - | - | 5 | 6 | 20 | 8 | 25 | 10 | | | | |
| 10 | 9 | 61 | 10 | 16 | - | - | - | - | - | - | 4 | 11 | 21 | 15 | 25 | 19 | | | | |
| 10 | 16 | 61 | 10 | 31 | - | - | - | - | - | - | 5 | 9 | 15 | 14 | 20 | 17 | | | | |
| 10 | 23 | 61 | 10 | 31 | - | - | - | - | - | - | 8 | 12 | 30 | 15 | 38 | 19 | | | | |
| 10 | 30 | 61 | 11 | 6 | - | - | - | - | - | - | 20 | 12 | 35 | 14 | 55 | 18 | | | | |
| 11 | 6 | 61 | 11 | 17 | - | - | - | - | - | - | 8 | 12 | 48 | 16 | 56 | 20 | | | | |
| 11 | 13 | 61 | 11 | 22 | - | - | - | - | - | - | 66 | 12 | 28 | 10 | 94 | 16 | | | | |
| 11 | 20 | 61 | 11 | 30 | - | - | - | - | - | - | 0 | 10 | 25 | 15 | 25 | 18 | | | | |
| 11 | 27 | 61 | 12 | 1 | 2 | 2 | 2 | 2 | 4 | 3 | 50 | 10 | 46 | 11 | 96 | 15 | | | | |
| 12 | 4 | 61 | 12 | 12 | - | - | - | - | - | - | 16 | 13 | 22 | 14 | 38 | 19 | | | | |
| 12 | 11 | 61 | 12 | 19 | - | - | - | - | - | - | 12 | 12 | 18 | 14 | 30 | 18 | | | | |
| 12 | 18 | 61 | 12 | 28 | - | - | - | - | - | - | 10 | 11 | 34 | 16 | 44 | 19 | | | | |
| 12 | 26 | 61 | 1 | 3 | 1 | 1 | 0 | 2 | 1 | 2 | 72 | 10 | 31 | 11 | 103 | 15 | | | | |
| 1 | 2 | 62 | 1 | 9 | - | - | - | - | - | - | 32 | 12 | 53 | 16 | 85 | 20 | | | | |
| 1 | 8 | 62 | 1 | 17 | - | - | - | - | - | - | 23 | 11 | 40 | 16 | 63 | 19 | | | | |
| 1 | 15 | 62 | 1 | 25 | - | - | - | - | - | - | 33 | 11 | 42 | 15 | 75 | 19 | | | | |
| 1 | 22 | 62 | 1 | 31 | - | - | - | - | - | - | 25 | 8 | 48 | 12 | 73 | 14 | | | | |
| 1 | 29 | 62 | 2 | 6 | - | - | - | - | - | - | 12 | 11 | 40 | 15 | 52 | 19 | | | | |
| 2 | 5 | 62 | 2 | 15 | - | - | - | - | - | - | 6 | 5 | 21 | 8 | 27 | 9 | | | | |
| 2 | 12 | 62 | 2 | 19 | - | - | - | - | - | - | 26 | 8 | 52 | 12 | 78 | 14 | | | | |
| 2 | 19 | 62 | 2 | 27 | - | - | - | - | - | - | 48 | 12 | 66 | 16 | 114 | 20 | | | | |
| 2 | 26 | 62 | 3 | 6 | 1 | 1 | 0 | 3 | 1 | 3 | 43 | 22 | 57 | 27 | 100 | 35 | | | | |
| 3 | 5 | 62 | 3 | 16 | - | - | - | - | - | - | 30 | 8 | 58 | 12 | 88 | 14 | | | | |
| 3 | 19 | 62 | 3 | 26 | - | - | - | - | - | - | 137 | 8 | 86 | 7 | 223 | 11 | | | | |
| 3 | 26 | 62 | 4 | 4 | 1 | 1 | 0 | 1 | 1 | 1 | 99 | 7 | 57 | 7 | 156 | 10 | | | | |
| 4 | 2 | 62 | 4 | 19 | - | - | - | - | - | - | 31 | 5 | 44 | 7 | 75 | 9 | | | | |
| 4 | 9 | 62 | 4 | 24 | - | - | - | - | - | - | 32 | 12 | 38 | 14 | 70 | 18 | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 22 | 11 | 34 | 14 | 56 | 18 | | | | |
| 4 | 23 | 62 | 5 | 24 | 1 | 1 | 1 | 2 | 2 | 2 | 26 | 12 | 29 | 15 | 55 | 19 | | | | |
| 4 | 30 | 62 | 5 | 31 | - | - | - | - | - | - | 31 | 28 | 36 | 30 | 67 | 41 | | | | |
| 5 | 7 | 62 | 6 | 8 | - | - | - | - | - | - | 3 | 15 | 28 | 19 | 31 | 24 | | | | |
| 5 | 14 | 62 | 6 | 26 | - | - | - | - | - | - | 39 | 13 | 46 | 14 | 85 | 19 | | | | |
| 5 | 21 | 62 | 6 | 27 | - | - | - | - | - | - | 2 | 11 | 35 | 14 | 37 | 18 | | | | |
| 5 | 28 | 62 | 6 | 30 | 0 | 1 | 1 | 1 | 1 | 1 | 14 | 7 | 52 | 8 | 66 | 11 | | | | |
| 6 | 4 | 62 | 7 | 3 | - | - | - | - | - | - | 2 | 10 | 33 | 14 | 35 | 17 | | | | |
| 6 | 11 | 62 | 7 | 10 | - | - | - | - | - | - | 9 | 11 | 24 | 14 | 33 | 18 | | | | |
| 6 | 18 | 62 | 7 | 12 | - | - | - | - | - | - | 5 | 29 | 14 | 15 | 19 | 33 | | | | |
| 6 | 25 | 62 | 7 | 23 | 0 | 1 | 1 | 2 | 1 | 2 | 16 | 11 | 3 | 14 | 19 | 18 | | | | |
| 7 | 23 | 62 | 8 | 20 | 1 | 2 | 0 | 2 | 1 | 3 | 11 | 6 | 48 | 7 | 59 | 9 | | | | |
| 7 | 30 | 62 | 8 | 22 | - | - | - | - | - | - | 1 | 11 | 25 | 14 | 26 | 18 | | | | |

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** ILLINOIS RIVER

**STATION LOCATION** ILLINOIS RIVER AT
PEORIA, ILLINOIS

67

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 6 | 62 | 8 | 17 | - | - | - | - | - | - | 11 | 12 | 43 | 15 | 54 | 19 | | | | | | |
| 8 | 13 | 62 | 10 | 8 | - | - | - | - | - | - | 11 | 12 | 30 | 15 | 41 | 19 | | | | | | |
| 8 | 20 | 62 | 9 | 5 | - | - | - | - | - | - | 3 | 6 | 18 | 7 | 21 | 9 | | | | | | |
| 8 | 27 | 62 | 9 | 12 | 0 | 1 | 0 | 2 | 0 | 2 | 8 | 13 | 12 | 17 | 20 | 21 | | | | | | |
| 9 | 4 | 62 | 9 | 28 | - | - | - | - | - | - | 6 | 12 | 24 | 16 | 30 | 20 | | | | | | |
| 9 | 10 | 62 | 10 | 12 | - | - | - | - | - | - | 11 | 11 | 22 | 13 | 33 | 17 | | | | | | |
| 9 | 24 | 62 | 10 | 19 | 1 | 2 | 0 | 2 | 1 | 3 | 15 | 9 | 20 | 10 | 35 | 13 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** ILLINOIS
**MAJOR BASIN** UPPER MISSISSIPPI RIVER
**MINOR BASIN** ILLINOIS RIVER
**STATION LOCATION** ILLINOIS RIVER AT
PEORIA, ILLINOIS

67

| DATE OF SAMPLE | | | ALGAE (Number per milliliter) | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 1500 | 0 | 0 | 100 | 0 | 210 | 20 | 700 | 480 | 120 | 40 | 71 | 2 | 69 | 1 | 68 | 1 | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 9500 | 20 | 40 | 1510 | 0 | 540 | 130 | 6330 | 930 | 1450 | 460 | 71 | 5 | 69 | 4 | 38 | 2 | 88 | 2 | 51 | 1 | 34 | 1 | 35 | 1 | 57 | 1 | 85 | 1 | 87 | 1 |
| 11 | 6 | 61 | 11000 | 20 | 40 | 1160 | 0 | 410 | 20 | 8570 | 750 | 730 | 350 | 71 | 6 | 69 | 4 | 92 | 3 | 38 | 2 | 68 | 2 | 25 | 1 | 34 | 1 | | | | | | |
| 11 | 20 | 61 | 11300 | 0 | 20 | 150 | 0 | 390 | 0 | 10180 | 560 | 370 | 270 | 71 | 3 | 69 | 2 | 51 | 1 | 92 | 1 | 88 | 1 | | | | | | | | | | |
| 12 | 4 | 61 | 10900 | 0 | 20 | 220 | 0 | 470 | 70 | 9720 | 360 | 1830 | 1010 | 71 | 6 | 57 | 1 | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 5900 | 0 | 0 | 160 | 0 | 470 | 40 | 5090 | 160 | 580 | 250 | 71 | 5 | 68 | 3 | 57 | 2 | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 3500 | 0 | 0 | 0 | 0 | 20 | 0 | 3000 | 480 | 100 | 100 | 71 | 4 | 68 | 3 | 67 | 1 | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 1900 | 0 | 0 | 0 | 0 | 100 | 0 | 1550 | 290 | 150 | 0 | 71 | 1 | 69 | 1 | 68 | 1 | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 400 | 0 | 0 | 20 | 0 | 50 | 20 | 230 | 90 | 0 | 0 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 400 | 0 | 0 | 0 | 0 | 130 | 0 | 90 | 130 | 580 | 420 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 600 | 200 | 70 | 20 | 0 | 0 | 20 | 110 | 130 | 90 | 180 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 600 | 0 | 0 | 40 | 0 | 150 | 0 | 150 | 310 | 20 | 80 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 2300 | 0 | 0 | 40 | 0 | 310 | 1550 | 230 | 150 | 40 | 20 | 62 | 4 | 51 | 1 | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 19400 | 210 | 0 | 700 | 0 | 2530 | 700 | 14370 | 910 | 1620 | 80 | 71 | 7 | 51 | 4 | 25 | 2 | 60 | 2 | 57 | 2 | 56 | 1 | 77 | 1 | 91 | 1 | | | | |
| 5 | 7 | 62 | 7200 | 0 | 0 | 2130 | 40 | 830 | 680 | 2220 | 1350 | 950 | 500 | 71 | 4 | 25 | 3 | 60 | 3 | 92 | 2 | 24 | 2 | 38 | 2 | 69 | 1 | 52 | 1 | 68 | 1 | 51 | 1 |
| 5 | 21 | 62 | 49900 | 11860 | 460 | 6540 | * | 2030 | 250 | 19070 | 3670 | 4680 | 1600 | 71 | 7 | 2 | 7 | 50 | 6 | 24 | 5 | 68 | 5 | 82 | 4 | 51 | 3 | 52 | 3 | 91 | 3 | 92 | 2 |
| 6 | 4 | 62 | 47100 | 410 | 500 | 6190 | * | 1540 | 500 | 32270 | 2440 | 4880 | 1040 | 50 | 5 | 24 | 5 | 92 | 4 | 71 | 3 | 69 | 3 | 38 | 3 | 52 | 3 | 34 | 3 | 25 | 3 | 88 | 3 |
| 6 | 18 | 62 | 37800 | 2200 | 830 | 6130 | 540 | 4100 | 500 | 17840 | 5630 | 7830 | 1200 | 71 | 7 | 51 | 5 | 24 | 4 | 68 | 4 | 3 | 4 | 92 | 4 | 35 | 3 | 87 | 3 | 88 | 3 | 16 | 3 |
| 7 | 2 | 62 | 63000 | 340 | 1100 | 5910 | 460 | 25830 | 930 | 16250 | 12150 | 10680 | 1980 | 68 | 7 | 88 | 6 | 71 | 5 | 52 | 5 | 51 | 4 | 92 | 4 | 24 | 4 | 38 | 4 | 91 | 4 | 87 | 3 |
| 7 | 16 | 62 | 14100 | 420 | 210 | 2450 | 380 | 380 | 80 | 7260 | 2870 | 2320 | 1440 | 68 | 5 | 71 | 4 | 35 | 3 | 38 | 3 | 92 | 3 | 88 | 3 | 69 | 3 | 91 | 2 | 50 | 2 | 3 | 2 |
| 8 | 6 | 62 | 12300 | 250 | 0 | 2770 | 0 | 4970 | 120 | 2940 | 1280 | 1740 | 170 | 51 | 5 | 68 | 5 | 52 | 4 | 38 | 4 | 88 | 2 | 87 | 2 | 69 | 2 | 25 | 2 | 35 | 1 | 24 | 1 |
| 8 | 20 | 62 | 17600 | 500 | 0 | 6090 | 80 | 2530 | 170 | 5710 | 2530 | 5260 | 410 | 68 | 6 | 38 | 5 | 51 | 4 | 88 | 4 | 87 | 3 | 25 | 2 | 44 | 2 | 71 | 2 | 40 | 2 | 35 | 1 |
| 9 | 4 | 62 | 74900 | 1010 | 380 | 8820 | 510 | 26460 | 0 | 24350 | 13340 | 15700 | 3800 | 51 | 8 | 68 | 8 | 87 | 6 | 88 | 6 | 38 | 5 | 71 | 4 | 69 | 4 | 52 | 4 | 40 | 3 | 26 | 3 |
| 9 | 17 | 62 | 28700 | 1080 | 40 | 3960 | * | 2860 | 790 | 10970 | 7040 | 4350 | 750 | 68 | 6 | 88 | 5 | 87 | 4 | 38 | 4 | 50 | 4 | 51 | 4 | 71 | 4 | 69 | 4 | 92 | 3 | 60 | 3 |
| *5 | 21 | 62 | | | | | 6030 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| *6 | 4 | 62 | | | | | 3300 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| *9 | 17 | 62 | | | | | 1950 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 56 | 56 | 58 | 26 | 83 | 7 | 26 | 3 | 8 | 0 | 10 | 78 | 21 | 3 | 11 | 3 | 2 | 2 | 17 | 1 | | | 9 | 50 | 1 | | | | | 0 | 0 |
| 10 | 16 | 61 | 83 | 46 | 58 | 28 | 56 | 24 | | 1 | 1 | 0 | 0 | 90 | 21 | 4 | 2 | 2 | 11 | 2 | | | | | 17 | 50 | 2 | 76 | 2 | | | 0 | 0 |
| 11 | 6 | 61 | 83 | 41 | 56 | 24 | 92 | 10 | 58 | 10 | 15 | 20 | 0 | 27 | 17 | 2 | 11 | 1 | | | | | | | 2 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 83 | 95 | 56 | 2 | 26 | 2 | | 1 | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 83 | 74 | 56 | 6 | 92 | 4 | 47 | 4 | 12 | 20 | 0 | 15 | 11 | 1 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 83 | 40 | 82 | 27 | 26 | 8 | 92 | 4 | 21 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 95 | 37 | 83 | 19 | 92 | 9 | 26 | 6 | 29 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 26 | 10 | 56 | 9 | 83 | 8 | 58 | 6 | 67 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 95 | 13 | 26 | 10 | 56 | 8 | 82 | 8 | 61 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 83 | 33 | 56 | 11 | 26 | 10 | 92 | 9 | 47 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 95 | 10 | 92 | 10 | 86 | 9 | 83 | 8 | 63 | 50 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 82 | 10 | 86 | 9 | 92 | 7 | 64 | 7 | 67 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 4 | 0 |
| 4 | 2 | 62 | 83 | 19 | 92 | 13 | 56 | 17 | 86 | 7 | 44 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 82 | 39 | 83 | 8 | 88 | 7 | 92 | 5 | 41 | 20 | 20 | 9 | | | | | | | | | | | 6 | 50 | 1 | | | | | 0 | 0 |
| 5 | 7 | 62 | 83 | 34 | 92 | 18 | 56 | 10 | 82 | 9 | 29 | 20 | 10 | 1540 | 2 | 8 | 11 | 3 | 21 | 2 | 7 | 1 | | | 102 | 50 | 5 | 76 | 5 | | | 1 | 0 |
| 5 | 21 | 62 | 83 | 32 | 82 | 28 | 56 | 19 | 26 | 13 | 8 | 340 | 20 | 1030 | 17 | 7 | 1 | 5 | 21 | 5 | 2 | 5 | 11 | 5 | 363 | 50 | 5 | 76 | 5 | | | 0 | 1 |
| 6 | 4 | 62 | 83 | 40 | 56 | 17 | 58 | 16 | 92 | 5 | 22 | 0 | 30 | 1570 | 2 | 8 | 11 | 6 | 17 | 6 | 22 | 6 | | | 467 | 50 | 7 | 76 | 5 | | | 0 | 0 |
| 6 | 18 | 62 | 83 | 63 | 26 | 10 | 56 | 6 | 58 | 6 | 15 | 40 | 20 | 682 | 2 | 7 | 17 | 6 | 11 | 5 | | | | | 104 | 76 | 5 | 50 | 5 | | | 0 | 0 |
| 7 | 2 | 62 | 26 | 34 | 58 | 32 | 56 | 16 | 83 | 5 | 13 | 340 | 0 | 1910 | 2 | 8 | 17 | 6 | 21 | 5 | 11 | 5 | 22 | 4 | 118 | 50 | 5 | 73 | 4 | 76 | 1 | 0 | 0 |
| 7 | 16 | 62 | 26 | 35 | 56 | 20 | 83 | 11 | 58 | 11 | 23 | 40 | 10 | 150 | 17 | 4 | 11 | 4 | 21 | 3 | | | | | 19 | 50 | 3 | | | | | 0 | 0 |
| 8 | 6 | 62 | 26 | 80 | 56 | 8 | 80 | 2 | 58 | 2 | 8 | 0 | 0 | 1540 | 21 | 8 | 15 | 6 | 17 | 5 | 2 | 5 | 22 | 4 | 47 | 50 | 4 | 76 | 2 | 51 | 1 | 6 | 0 |
| 8 | 20 | 62 | 26 | 77 | 82 | 6 | 56 | 4 | 70 | 2 | 11 | 0 | 0 | 91 | 11 | 4 | 2 | 3 | 22 | 1 | 18 | 1 | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 26 | 61 | 56 | 11 | 65 | 6 | 82 | 4 | 18 | 0 | 0 | 174 | 2 | 4 | 15 | 3 | 22 | 3 | 17 | 2 | 11 | 1 | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 26 | 51 | 82 | 11 | 56 | 6 | 71 | 6 | 26 | 0 | 0 | 808 | 15 | 7 | 2 | 5 | 21 | 5 | 17 | 5 | 22 | 4 | 60 | 50 | 5 | 72 | 2 | 53 | 2 | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** ILLINOIS
**MAJOR BASIN** UPPER MISSISSIPPI RIVER
**MINOR BASIN** ILLINOIS RIVER
**STATION LOCATION** ILLINOIS RIVER AT
PEORIA, ILLINOIS

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS | |
| 11 | 28 | 61 | 12 | 5 | 5003 | 174 | 38 | 136 | 0 | 6 | 23 | 3 | 2 | 17 | 1 | 4 | 1 | 1 | 3 | |
| 1 | 2 | 62 | 1 | 10 | 4922 | 284 | 81 | 203 | 2 | 14 | 45 | 3 | 4 | 35 | 3 | 9 | 3 | 2 | 6 | |
| 2 | 5 | 62 | 2 | 13 | 4990 | 243 | 90 | 153 | 4 | 18 | 26 | 2 | 3 | 20 | 1 | 7 | 4 | 2 | 29 | |
| 3 | 5 | 62 | 3 | 12 | 4876 | 229 | 78 | 151 | 0 | 10 | 41 | 3 | 4 | 33 | 1 | 9 | 3 | 2 | 13 | |
| 5 | 14 | 62 | 5 | 21 | 4997 | 192 | 86 | 106 | 2 | 17 | 35 | 3 | 2 | 26 | 4 | 11 | 8 | 2 | 11 | |
| 7 | 2 | 62 | 7 | 10 | 3879 | 393 | 170 | 223 | 2 | 30 | 65 | 8 | 6 | 47 | 4 | 25 | 24 | 2 | 22 | |
| 8 | 6 | 62 | 8 | 13 | 4974 | 318 | 152 | 166 | 3 | 26 | 49 | 6 | 4 | 37 | 2 | 20 | 17 | 3 | 34 | |
| 9 | 10 | 62 | 9 | 17 | 4921 | 269 | 84 | 185 | 1 | 13 | 38 | 4 | 3 | 27 | 4 | 15 | 7 | 2 | 8 | |

**STATION LOCATION** ILLINOIS RIVER AT
PEORIA, ILLINOIS

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 15.0 | 7.0 | 7.5 | - | - | - | - | - | 18 | 130 | 220 | 35 | 45 | - | - | - | 2400 |
| 10 | 9 | 61 | 20.8 | 9.0 | 7.9 | - | - | - | - | - | 22 | 180 | 316 | 25 | 60 | - | - | - | 5500 |
| 10 | 16 | 61 | 16.7 | 9.4 | 7.9 | - | - | - | - | - | 30 | 206 | 350 | 25 | 85 | - | - | - | 2000 |
| 10 | 23 | 61 | 14.0 | 8.1 | 7.8 | - | - | - | - | - | 38 | 218 | 354 | 25 | 90 | - | - | - | 2000 |
| 10 | 30 | 61 | 14.0 | 9.5 | 7.9 | - | - | - | - | - | 39 | 216 | 346 | 25 | 110 | 115 | 1.2 | 454 | 270 |
| 11 | 6 | 61 | 11.2 | 9.5 | 7.9 | - | - | - | - | - | 28 | 214 | 366 | 20 | 80 | - | - | - | 550 |
| 11 | 13 | 61 | 10.2 | 11.0 | 7.9 | - | - | - | - | - | 23 | 228 | 370 | 25 | 75 | 110 | .4 | 439 | 350 |
| 11 | 20 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 135 | .8 | 474 | - |
| 11 | 27 | 61 | 8.3 | 11.5 | 7.8 | - | - | - | - | - | 23 | 224 | 358 | 25 | 120 | 130 | 1.4 | 443 | 750 |
| 12 | 4 | 61 | - | - | - | - | 35 | - | - | - | - | - | - | - | - | 110 | 1.2 | 416 | - |
| 12 | 11 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 115 | 1.4 | 447 | - |
| 12 | 18 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 90 | 1.6 | 449 | - |
| 1 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 110 | 1.4 | 456 | - |
| 1 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 95 | .1 | 454 | - |
| 1 | 15 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 | 1.1 | - | - |
| 1 | 22 | 62 | 1.5 | 10.8 | 7.3 | - | - | - | - | - | 40 | 204 | 346 | 20 | 25 | 100 | .0 | 408 | 410 |
| 1 | 29 | 62 | 2.0 | 10.2 | 7.3 | - | - | - | - | - | 35 | 208 | 344 | 15 | 10 | - | 1.4 | 446 | 75 |
| 2 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 98 | - | 380 | - |
| 2 | 12 | 62 | - | - | - | - | 17 | - | - | - | - | - | - | - | - | 80 | .0 | 411 | - |
| 2 | 19 | 62 | 2.2 | 12.0 | 7.5 | - | - | - | - | - | 35 | 182 | 308 | 25 | 110 | 95 | - | - | 8000 |
| 2 | 26 | 62 | 2.0 | 12.3 | 7.6 | - | - | - | - | - | 30 | 200 | 334 | 20 | 50 | 105 | .3 | 394 | 450 |
| 3 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 95 | .4 | 415 | - |
| 3 | 14 | 62 | - | - | - | - | 25 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 65 | - | 294 | - |
| 3 | 26 | 62 | 7.0 | 11.3 | 7.6 | - | - | - | - | - | 14 | 132 | 218 | 40 | 130 | - | - | - | 350 |
| 4 | 2 | 62 | 8.7 | 10.1 | 7.7 | - | - | - | - | .2 | 14 | 138 | 246 | 40 | 60 | 70 | .1 | 300 | 90 |
| 4 | 9 | 62 | 10.0 | 10.4 | 7.9 | - | - | - | - | .1 | 17 | 168 | 296 | 20 | 60 | 85 | .2 | 363 | 60 |
| 4 | 16 | 62 | 9.2 | 12.3 | 8.2 | - | - | - | - | - | 20 | 184 | 316 | 20 | 50 | 100 | .2 | 385 | 70 |
| 4 | 23 | 62 | 13.8 | 12.3 | 8.5 | - | - | - | - | - | 23 | 196 | 328 | 25 | 105 | 108 | .1 | 450 | 300 |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 105 | .9 | 445 | - |
| 5 | 7 | 62 | 20.3 | 7.0 | 7.9 | - | - | - | - | - | 25 | 186 | 300 | 25 | 100 | 100 | .1 | 404 | 400 |
| 5 | 14 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 76 | .7 | 377 | - |
| 5 | 21 | 62 | - | - | - | - | 32 | - | - | - | - | - | - | - | - | 100 | - | 371 | - |
| 5 | 28 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 95 | .5 | 389 | - |
| 6 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 110 | - | 366 | - |
| 6 | 11 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 | - | 344 | - |
| 6 | 18 | 62 | 26.0 | 8.9 | 8.0 | - | - | - | - | - | 24 | 164 | 272 | 20 | 150 | 80 | .6 | 362 | 50 |
| 6 | 25 | 62 | 27.5 | 14.8 | 8.2 | - | - | - | - | - | 30 | 170 | 278 | 25 | 90 | 90 | 1.1 | 394 | 150 |
| 7 | 9 | 62 | 27.5 | 4.1 | 7.6 | - | - | - | - | - | 32 | 154 | 248 | 25 | 110 | - | - | - | 55 |

## NATIONAL WATER QUALITY NETWORK

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** ILLINOIS
**MAJOR BASIN** UPPER MISSISSIPPI RIVER
**MINOR BASIN** ILLINOIS RIVER
**STATION LOCATION** ILLINOIS RIVER AT
PEORIA, ILLINOIS

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 16 | 62 | 25.0 | 4.0 | 7.7 | - | - | - | - | - | 28 | 144 | 244 | 25 | 115 | - | - | - | 300 |
| 7 | 23 | 62 | 26.0 | 5.5 | 7.9 | - | - | - | - | - | 27 | 160 | 264 | 25 | 100 | 80 | .9 | 329 | 100 |
| 7 | 30 | 62 | 23.2 | 5.7 | 7.9 | - | - | - | - | - | 31 | 164 | 260 | 25 | 90 | 85 | .2 | 362 | *50 |
| 8 | 6 | 62 | 26.0 | 3.5 | 7.7 | - | - | - | - | - | - | 156 | 260 | 25 | 70 | - | - | - | *50 |
| 8 | 13 | 62 | 24.3 | 4.8 | 7.8 | - | - | - | - | - | 32 | 150 | 240 | 25 | 110 | 86 | 1.1 | 338 | 100 |
| 8 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 8 | 27 | 62 | 25.5 | 3.8 | 7.6 | - | - | - | - | - | 34 | 134 | 226 | 25 | 75 | 80 | .0 | 300 | 350 |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 80 | 1.6 | 327 | - |
| 9 | 10 | 62 | 23.0 | 5.2 | 7.5 | - | - | - | - | - | 37 | 142 | 230 | 25 | 100 | - | - | - | 300 |
| 9 | 17 | 62 | 23.1 | 4.9 | 7.5 | - | - | - | - | - | 35 | 148 | 236 | 25 | 120 | - | - | - | 200 |
| 9 | 24 | 62 | 20.0 | 6.5 | 7.8 | - | - | - | - | - | 37 | 150 | 238 | 25 | 95 | 75 | 2.0 | 361 | 300 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Kingston Mines, Illinois
Operated by U.S. Geological Survey

| | |
|---|---|
| STATE | Illinois |
| MAJOR BASIN | Upper Mississippi River |
| MINOR BASIN | Illinois River |
| STATION LOCATION | Illinois River at<br>Peoria, Illinois |

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 35.700 | 14.900 | 20.500 | 9.000 | 10.000 | 19.600 | 48.700 | 18.100 | 14.900 | 7.720 | 8.290 | 6.030 |
| 2 | 35.200 | 15.700 | 20.000 | 8.580 | 11.000 | 20.900 | 46.800 | 18.700 | 12.900 | 7.940 | 8.330 | 6.000 |
| 3 | 34.300 | 14.200 | 19.200 | 8.980 | 12.200 | 21.800 | 45.000 | 18.600 | 12.700 | 8.950 | 7.590 | 5.760 |
| 4 | 30.900 | 14.000 | 18.800 | 8.750 | 13.900 | 20.500 | 42.800 | 18.000 | 11.700 | 9.400 | 7.150 | 5.630 |
| 5 | 24.700 | 14.300 | 17.100 | 8.650 | 15.700 | 20.100 | 42.400 | 18.100 | 11.000 | 11.400 | 6.350 | 5.400 |
| 6 | 21.800 | 15.900 | 14.900 | 9.320 | 17.000 | 19.500 | 40.700 | 17.100 | 11.000 | 13.600 | 6.350 | 5.440 |
| 7 | 21.200 | 17.400 | 14.300 | 11.700 | 18.000 | 18.900 | 39.500 | 17.100 | 10.700 | 13.200 | 6.830 | 6.430 |
| 8 | 21.100 | 17.100 | 14.700 | 13.800 | 20.400 | 18.000 | 37.500 | 15.800 | 10.400 | 12.900 | 7.530 | 6.070 |
| 9 | 20.800 | 16.100 | 14.800 | 16.200 | 20.200 | 16.300 | 37.200 | 16.200 | 10.400 | 12.700 | 7.860 | 6.070 |
| 10 | 18.500 | 17.800 | 15.000 | 21.800 | 22.000 | 18.000 | 37.400 | 17.500 | 11.000 | 11.400 | 7.590 | 6.150 |
| 11 | 14.500 | 18.000 | 15.000 | 19.600 | 22.200 | 21.200 | 37.200 | 18.500 | 10.400 | 10.500 | 7.440 | 6.080 |
| 12 | 16.100 | 19.400 | 15.000 | 13.900 | 21.600 | 25.800 | 35.500 | 21.100 | 9.010 | 8.700 | 7.200 | 5.670 |
| 13 | 18.500 | 16.800 | 14.200 | 12.500 | 20.100 | 32.600 | 34.000 | 22.600 | 9.380 | 8.980 | 7.280 | 5.570 |
| 14 | 18.600 | 11.300 | 14.000 | 12.000 | 19.900 | 37.700 | 32.200 | 23.500 | 19.300 | 9.140 | 7.150 | 5.240 |
| 15 | 18.100 | 10.800 | 13.400 | 11.500 | 19.400 | 39.400 | 31.800 | 25.100 | 21.400 | 13.200 | 6.870 | 4.920 |
| 16 | 16.700 | 11.000 | 13.400 | 10.500 | 20.300 | 38.300 | 30.000 | 25.800 | 20.900 | 17.600 | 6.690 | 5.060 |
| 17 | 18.000 | 11.000 | 13.700 | 10.000 | 20.300 | 37.800 | 28.500 | 25.300 | 19.900 | 15.900 | 6.110 | 5.190 |
| 18 | 14.800 | 13.300 | 13.900 | 9.700 | 20.100 | 38.000 | 27.900 | 23.600 | 16.400 | 17.200 | 5.820 | 4.930 |
| 19 | 12.000 | 16.400 | 14.200 | 9.300 | 20.500 | 39.500 | 26.600 | 23.500 | 10.200 | 17.800 | 5.570 | 4.690 |
| 20 | 10.500 | 19.600 | 14.300 | 9.000 | 19.600 | 43.200 | 25.400 | 22.300 | 9.520 | 17.000 | 5.390 | 4.750 |
| 21 | 10.600 | 18.700 | 13.800 | 8.800 | 19.800 | 51.600 | 23.200 | 22.200 | 9.300 | 16.700 | 5.390 | 4.680 |
| 22 | 10.800 | 18.500 | 13.800 | 8.600 | 19.300 | 55.100 | 23.000 | 21.100 | 9.430 | 15.700 | 5.120 | 4.800 |
| 23 | 11.100 | 19.100 | 14.300 | 8.400 | 18.900 | 58.000 | 23.000 | 19.100 | 9.500 | 15.700 | 5.000 | 5.130 |
| 24 | 11.800 | 19.200 | 14.200 | 8.200 | 18.600 | 61.000 | 22.500 | 19.300 | 9.770 | 14.500 | 5.180 | 5.020 |
| 25 | 12.300 | 19.400 | 13.800 | 8.000 | 18.200 | 60.900 | 22.100 | 19.600 | 9.600 | 14.900 | 5.200 | 4.900 |
| 26 | 12.100 | 20.900 | 13.000 | 9.000 | 18.400 | 59.000 | 21.200 | 18.100 | 9.650 | 14.900 | 5.500 | 5.020 |
| 27 | 9.900 | 22.100 | 12.500 | 9.500 | 19.200 | 57.600 | 20.700 | 18.100 | 9.610 | 12.300 | 5.630 | 5.300 |
| 28 | 8.380 | 21.400 | 12.000 | 10.500 | 19.000 | 54.800 | 19.900 | 18.300 | 9.410 | 10.300 | 5.380 | 5.000 |
| 29 | 8.000 | 20.900 | 11.000 | 10.000 | | 54.200 | 19.700 | 17.800 | 7.990 | 9.400 | 5.180 | 4.140 |
| 30 | 11.700 | 20.300 | 10.000 | 9.700 | | 52.500 | 18.800 | 16.800 | 7.560 | 8.720 | 5.230 | 4.550 |
| 31 | 14.000 | | 9.500 | 9.500 | | 50.400 | | 16.600 | | 8.320 | 5.610 | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 5 | 61 | 10 | 23 | - | - | - | - | - | - | 4 | 4 | 11 | 6 | 15 | 7 | | | | | | |
| 10 | 13 | 61 | 10 | 25 | - | - | - | - | - | - | 5 | 5 | 6 | 7 | 11 | 9 | | | | | | |
| 10 | 19 | 61 | 10 | 31 | - | - | - | - | - | - | 8 | 11 | 4 | 13 | 12 | 24 | | | | | | |
| 11 | 24 | 61 | 12 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 14 | 4 | 13 | 5 | 27 | 6 | | | | | | |
| 11 | 3 | 61 | 11 | 14 | - | - | - | - | - | - | 4 | 5 | 8 | 6 | 12 | 8 | | | | | | |
| 11 | 8 | 61 | 11 | 21 | - | - | - | - | - | - | 6 | 5 | 19 | 7 | 25 | 9 | | | | | | |
| 11 | 17 | 61 | 11 | 29 | - | - | - | - | - | - | 5 | 6 | 18 | 8 | 23 | 10 | | | | | | |
| 12 | 1 | 61 | 12 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 13 | 6 | 13 | 7 | 26 | 9 | | | | | | |
| 12 | 7 | 61 | 12 | 14 | - | - | - | - | - | - | 27 | 6 | 9 | 7 | 36 | 9 | | | | | | |
| 12 | 14 | 61 | 12 | 22 | - | - | - | - | - | - | 36 | 8 | 12 | 4 | 48 | 9 | | | | | | |
| 12 | 21 | 61 | 12 | 29 | - | - | - | - | - | - | 63 | 12 | 11 | 6 | 74 | 13 | | | | | | |
| 12 | 29 | 61 | 1 | 10 | - | - | - | - | - | - | 16 | 6 | 10 | 6 | 26 | 8 | | | | | | |
| 1 | 4 | 62 | 1 | 15 | - | - | - | - | - | - | 7 | 5 | 11 | 7 | 18 | 9 | | | | | | |
| 1 | 12 | 62 | 1 | 22 | - | - | - | - | - | - | 12 | 6 | 11 | 6 | 23 | 8 | | | | | | |
| 1 | 19 | 62 | 1 | 29 | - | - | - | - | - | - | 8 | 7 | 5 | 7 | 13 | 10 | | | | | | |
| 1 | 26 | 62 | 2 | 7 | 0 | 1 | 0 | 1 | 0 | 1 | 16 | 5 | 12 | 4 | 28 | 6 | | | | | | |
| 2 | 5 | 62 | 2 | 14 | - | - | - | - | - | - | 15 | 5 | 13 | 6 | 28 | 7 | | | | | | |
| 2 | 9 | 62 | 2 | 19 | - | - | - | - | - | - | 5 | 5 | 13 | 6 | 18 | 7 | | | | | | |
| 2 | 16 | 62 | 2 | 27 | - | - | - | - | - | - | 18 | 5 | 17 | 6 | 35 | 7 | | | | | | |
| 2 | 23 | 62 | 3 | 6 | - | - | - | - | - | - | 6 | 5 | 13 | 6 | 19 | 8 | | | | | | |
| 2 | 26 | 62 | 3 | 13 | 3 | 2 | 0 | 1 | 3 | 2 | 25 | 6 | 10 | 4 | 35 | 7 | | | | | | |
| 3 | 9 | 62 | 3 | 20 | - | - | - | - | - | - | 17 | 7 | 8 | 6 | 25 | 9 | | | | | | |
| 3 | 16 | 62 | 3 | 30 | - | - | - | - | - | - | 55 | 6 | 43 | 5 | 98 | 7 | | | | | | |
| 3 | 20 | 62 | 4 | 3 | - | - | - | - | - | - | 62 | 8 | 13 | 4 | 75 | 9 | | | | | | |
| 3 | 28 | 62 | 4 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 4 | 9 | 5 | 17 | 6 | | | | | | |
| 4 | 5 | 62 | 4 | 19 | - | - | - | - | - | - | 7 | 5 | 15 | 6 | 22 | 7 | | | | | | |
| 4 | 18 | 62 | 5 | 1 | - | - | - | - | - | - | 4 | 5 | 13 | 6 | 17 | 7 | | | | | | |
| 4 | 25 | 62 | 5 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 8 | 6 | 13 | 7 | | | | | | |
| 5 | 10 | 62 | 6 | 19 | - | - | - | - | - | - | 0 | 7 | 6 | 9 | 6 | 11 | | | | | | |
| 5 | 17 | 62 | 6 | 22 | - | - | - | - | - | - | 2 | 3 | 13 | 4 | 15 | 5 | | | | | | |
| 5 | 24 | 62 | 6 | 27 | - | - | - | - | - | - | 7 | 5 | 14 | 7 | 21 | 9 | | | | | | |
| 5 | 31 | 62 | 7 | 2 | 0 | 0 | 1 | 1 | 1 | 1 | 4 | 6 | 17 | 7 | 21 | 9 | | | | | | |
| 6 | 8 | 62 | 7 | 6 | - | - | - | - | - | - | 7 | 5 | 21 | 6 | 28 | 8 | | | | | | |
| 6 | 15 | 62 | 7 | 12 | - | - | - | - | - | - | 4 | 6 | 7 | 7 | 11 | 9 | | | | | | |
| 6 | 21 | 62 | 7 | 20 | - | - | - | - | - | - | 8 | 3 | 13 | 4 | 21 | 5 | | | | | | |
| 7 | 16 | 62 | 10 | 6 | - | - | - | - | - | - | 3 | 5 | 19 | 7 | 22 | 9 | | | | | | |
| 8 | 10 | 62 | 8 | 30 | - | - | - | - | - | - | 4 | 5 | 7 | 7 | 11 | 8 | | | | | | |
| 8 | 17 | 62 | 8 | 27 | - | - | - | - | - | - | 15 | 6 | 13 | 9 | 28 | 11 | | | | | | |
| 9 | 3 | 62 | 9 | 18 | - | - | - | - | - | - | 2 | 12 | 5 | 18 | 7 | 22 | | | | | | |
| 9 | 4 | 62 | 10 | 6 | - | - | - | - | - | - | 12 | 11 | 15 | 15 | 27 | 19 | | | | | | |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** KANAWHA RIVER

**STATION LOCATION** KANAWHA RIVER AT
WINFIELD DAM, WEST VIRGINIA 68

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 9 | 14 | 62 | 10 | 12 | - | - | - | - | - | - | 27 | 5 | 25 | 9 | 52 | 10 | | | | | | |
| 9 | 19 | 62 | 10 | 15 | - | - | - | - | - | - | 13 | 10 | 15 | 14 | 28 | 17 | | | | | | |
| 9 | 26 | 62 | 10 | 18 | 0 | 0 | 1 | 1 | 1 | 1 | 9 | 6 | 13 | 8 | 22 | 10 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

| | |
|---|---|
| **STATE** | WEST VIRGINIA |
| **MAJOR BASIN** | OHIO RIVER |
| **MINOR BASIN** | KANAWHA RIVER |
| **STATION LOCATION** | KANAWHA RIVER AT<br>WINFIELD DAM, WEST VIRGINIA 68 |

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | TOTAL | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 13 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 50 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 3 | 61 | 100 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 60 | 20 | 60 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 300 | 0 | 0 | 90 | 0 | 110 | 0 | 50 | 20 | 0 | 110 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 400 | 0 | 0 | 20 | 0 | 20 | 0 | 20 | 310 | 0 | 120 | | | | | | | | | | | | | | | | | | | | |
| 12 | 15 | 61 | 1700 | 0 | 0 | 20 | 0 | 40 | 0 | 310 | 1370 | 40 | 750 | 84 | 2 | 92 | 1 | 69 | 1 | 82 | 1 | | | | | | | | | | | | |
| 12 | 29 | 61 | 100 | 0 | 0 | 0 | 0 | 50 | 0 | 0 | 70 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 1 | 12 | 62 | 200 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 160 | 0 | 310 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 100 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 70 | | | | | | | | | | | | | | | | | | | | |
| 2 | 16 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 190 | 250 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 3 | 2 | 62 | 700 | 0 | 0 | 0 | 0 | 60 | 0 | 20 | 640 | 20 | 60 | 92 | 2 | 82 | 1 | | | | | | | | | | | | | | | | |
| 3 | 16 | 62 | 4600 | 0 | 3370 | 20 | 20 | 40 | 0 | 150 | 970 | 20 | 410 | 16 | 5 | 92 | 1 | | | | | | | | | | | | | | | | |
| 3 | 30 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 90 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 4 | 15 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 0 | 80 | | | | | | | | | | | | | | | | | | | | |
| 5 | 4 | 62 | 7200 | 110 | 80 | 110 | 0 | 400 | 0 | 6080 | 380 | 780 | 380 | 68 | 6 | 71 | 4 | 51 | 2 | 92 | 1 | | | | | | | | | | | | |
| 5 | 17 | 62 | 6300 | 0 | 650 | 1880 | 0 | 800 | 0 | 2190 | 740 | 400 | 80 | 71 | 4 | 57 | 3 | 17 | 3 | 92 | 3 | 44 | 2 | 38 | 2 | 32 | 1 | 45 | 1 | 40 | 1 | | |
| 5 | 31 | 62 | 725200 | 9990 | 170 | 790 | 0 | 2320 | 500 | 12400 | 990 | 1410 | 990 | 4 | 9 | 51 | 4 | 92 | 3 | 57 | 2 | 60 | 2 | 69 | 1 | 25 | 1 | 40 | 1 | 32 | 1 | 16 | 1 |
| 6 | 15 | 62 | 1600 | 0 | 0 | 250 | 0 | 230 | 0 | 640 | 500 | 230 | 40 | 68 | 2 | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 6700 | 170 | 0 | 750 | 0 | 890 | 40 | 4040 | 790 | 790 | 80 | 68 | 5 | 51 | 2 | 25 | 2 | 57 | 2 | 84 | 1 | | | | | | | | | | |
| 7 | 13 | 62 | 1900 | 0 | 0 | 330 | 0 | 1040 | 120 | 210 | 250 | 120 | 0 | 51 | 3 | | | | | | | | | | | | | | | | | | |
| 8 | 3 | 62 | 4100 | 340 | 0 | 570 | 0 | 230 | 110 | 2240 | 630 | 250 | 130 | 68 | 4 | 92 | 1 | 88 | 1 | 10 | 1 | 38 | 1 | 25 | 1 | | | | | | | | |
| 8 | 17 | 62 | 2900 | 310 | 0 | 810 | 0 | 1530 | 0 | 170 | 40 | 250 | 0 | 51 | 4 | 25 | 3 | 3 | 1 | 54 | 1 | 68 | 1 | | | | | | | | | | |
| 9 | 2 | 62 | 11000 | 7870 | 250 | 1410 | 0 | 1160 | 0 | 210 | 80 | 40 | 40 | 3 | 6 | 51 | 3 | 25 | 3 | 17 | 1 | 44 | 1 | 68 | 1 | | | | | | | | |
| 9 | 14 | 62 | 2600 | 0 | 80 | 510 | 0 | 820 | 0 | 930 | 300 | 40 | 130 | 51 | 3 | 68 | 3 | | | | | | | | | | | | | | | | |
| 9 | 28 | 62 | 100 | 10 | 0 | 80 | 0 | 30 | 0 | 10 | 0 | 40 | 0 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 13 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 3 | 61 | | | | | | | | | | 7840 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 11 | 20 | 61 | | | | | | | | | | 90 | 10 | 47 | 15 | 3 | 6 | 2 | | | | | | | 0 | | | | | | | 43 | 0 |
| 12 | 4 | 61 | 62 | 92 | 92 | 1 | | 1 | | 1 | 5 | 520 | 10 | 12 | 6 | 1 | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 12 | 15 | 61 | 47 | 77 | 62 | 7 | 92 | 5 | 36 | 2 | 9 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 29 | 61 | 47 | 14 | 92 | 12 | 64 | 8 | 70 | 7 | 59 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 1 | 12 | 62 | 92 | 11 | 36 | 8 | 51 | 7 | 62 | 7 | 67 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 2 | 5 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 16 | 62 | 36 | 16 | 92 | 10 | 2 | 8 | 51 | 7 | 69 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 2 | 62 | 92 | 30 | 36 | 12 | 45 | 9 | 62 | 6 | 43 | 100 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 16 | 62 | 62 | 32 | 92 | 20 | 2 | 7 | 36 | 6 | 35 | 890 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 30 | 62 | 2 | 9 | 92 | 8 | 36 | 8 | 62 | 6 | 69 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 15 | 62 | 92 | 15 | 47 | 10 | 65 | 6 | 36 | 6 | 63 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 5 | 4 | 62 | 92 | 29 | 27 | 26 | 82 | 8 | 2 | 4 | 33 | 20 | 10 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 17 | 62 | 82 | 63 | 91 | 16 | 92 | 14 | 70 | 1 | 6 | 40 | 50 | 74 | 15 | 4 | 11 | 2 | 17 | 1 | | | | | 5 | 76 | 1 | | | | | 1 | 0 |
| 5 | 31 | 62 | 28 | 35 | 58 | 33 | 82 | 17 | 56 | 11 | 4 | 0 | 0 | 116 | 22 | 5 | 17 | 4 | 2 | 3 | 11 | 1 | | | 6 | 76 | 2 | | | | | 0 | 0 |
| 6 | 15 | 62 | 27 | 43 | 28 | 7 | 92 | 5 | 56 | 5 | 40 | 0 | 10 | 5 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 27 | 41 | 28 | 26 | 47 | 12 | 82 | 3 | 18 | 0 | 0 | 48 | 15 | 4 | | | | | | | | | 0 | | | | | | | 4 | 0 |
| 7 | 13 | 62 | | | | | | | | | | 0 | 0 | 7 | 20 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 3 | 62 | 28 | 67 | 27 | 20 | 58 | 5 | 56 | 2 | 6 | 0 | 0 | 446 | 2 | 6 | 1 | 4 | 7 | 4 | 21 | 4 | 17 | 3 | 124 | 76 | 5 | 53 | 4 | 50 | 2 | 2 | 0 |
| 8 | 17 | 62 | 27 | 85 | 26 | 3 | 92 | 2 | 71 | 2 | 8 | 0 | 0 | 117 | 15 | 5 | 20 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 2 | 62 | 27 | 61 | 28 | 16 | 57 | 4 | 71 | 4 | 15 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 14 | 62 | 27 | 44 | 28 | 10 | 71 | 6 | 2 | 6 | 34 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 28 | 62 | 27 | 50 | 71 | 6 | 2 | 5 | 82 | 5 | 34 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

***RESULTS IN MICROGRAMS PER LITER***

*(Parts per billion)*

**STATE** WEST VIRGINIA

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** KANAWHA RIVER

**STATION LOCATION** KANAWHA RIVER AT
WINFIELD DAM, WEST VIRGINIA 68

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 11 | 3 | 61 | 11 | 10 | 4040 | 419 | 292 | 127 | 3 | 41 | 161 | 11 | 21 | 108 | 21 | 20 | 12 | 9 | 46 |
| 12 | 7 | 61 | 12 | 14 | 2960 | 677 | 542 | 135 | 0 | 43 | 309 | 15 | 25 | 210 | 59 | 22 | 16 | 6 | 146 |
| 12 | 29 | 61 | 1 | 5 | 3120 | 400 | 265 | 135 | 8 | 34 | 143 | 23 | 20 | 96 | 4 | 16 | 8 | 6 | 50 |
| 1 | 26 | 62 | 2 | 2 | 4010 | 229 | 134 | 95 | 7 | 12 | 72 | 10 | 7 | 48 | 7 | 9 | 4 | 3 | 27 |
| 2 | 16 | 62 | 2 | 23 | 2150 | 600 | 401 | 199 | 8 | 36 | 177 | 20 | 21 | 129 | 7 | 20 | 12 | 8 | 140 |
| 2 | 28 | 62 | 3 | 16 | 2880 | 269 | 125 | 144 | 3 | 16 | 59 | 12 | 7 | 37 | 3 | 11 | 6 | 3 | 27 |
| 4 | 5 | 62 | 4 | 15 | 2830 | 491 | 316 | 175 | 6 | 38 | 142 | 16 | 14 | 84 | 28 | 22 | 16 | 6 | 86 |
| 4 | 26 | 62 | 5 | 10 | 4360 | 382 | 292 | 90 | 6 | 47 | 117 | 7 | 9 | 86 | 15 | 17 | 11 | 9 | 85 |
| 5 | 25 | 62 | 6 | 2 | 5020 | 451 | 357 | 94 | 11 | 64 | 161 | 5 | 16 | 111 | 29 | 28 | 18 | 14 | 61 |
| 7 | 5 | 62 | 7 | 12 | 3300 | 521 | 382 | 139 | 4 | 69 | 145 | 6 | 10 | 103 | 26 | 46 | 11 | 50 | 57 |
| 8 | 4 | 62 | 8 | 12 | 5310 | 527 | 413 | 114 | 4 | 74 | 174 | 5 | 16 | 122 | 31 | 25 | 12 | 17 | 107 |
| 8 | 30 | 62 | 9 | 11 | 4980 | 1223 | 1061 | 162 | 11 | 180 | 435 | 13 | 44 | 331 | 47 | 64 | 21 | 32 | 318 |
| 9 | 28 | 62 | 10 | 8 | 4990 | 831 | 678 | 153 | 14 | 136 | 312 | 10 | 31 | 237 | 34 | 34 | 14 | 20 | 148 |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** WEST VIRGINIA
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** KANAWHA RIVER
**STATION LOCATION** KANAWHA RIVER AT
WINFIELD DAM, WEST VIRGINIA 68

| DATE F SAMPLE | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 13 | 61 | 23.0 | .0 | 7.4 | 10.5 | 36 | - | - | 2.1 | 82 | 48 | 112 | 10 | 2 | 28 | - | 191 | - |
| 19 | 61 | 21.0 | .0 | 6.8 | 14.4 | 77 | - | - | 2.0 | 89 | 54 | 164 | 10 | 2 | 10 | - | 209 | - |
| 8 | 61 | 15.0 | 3.8 | 6.8 | 9.0 | 22 | - | - | .6 | 36 | 42 | 78 | 10 | 2 | 10 | - | 181 | - |
| 1 | 61 | - | - | - | - | - | - | - | - | 2 | - | - | - | - | 28 | - | - | - |
| 7 | 61 | 7.0 | 8.1 | 6.9 | 1.5 | 22 | - | - | 1.2 | 52 | 42 | 80 | 10 | 2 | 5 | - | 162 | *200 |
| 14 | 61 | 7.0 | 10.7 | 6.8 | 4.5 | 80 | - | - | 1.4 | 10 | 38 | 56 | 40 | 250 | 19 | - | 132 | - |
| 21 | 61 | 8.0 | 10.1 | 6.7 | 10.1 | 10 | - | - | .4 | 8 | 28 | 44 | 10 | 2 | - | - | 139 | 27000 |
| 28 | 61 | 3.0 | 11.6 | 6.6 | 7.0 | 15 | - | - | .4 | 20 | 34 | 20 | 10 | 2 | - | - | 141 | 2600 |
| 4 | 62 | 2.7 | 12.5 | - | 12.1 | 16 | - | - | 1.6 | 19 | 39 | - | 10 | 2 | - | - | 122 | *100 |
| 12 | 62 | 2.0 | 13.7 | 6.7 | 7.6 | - | - | - | - | 11 | 29 | 36 | 10 | 2 | - | - | - | - |
| 18 | 62 | 3.0 | 13.7 | 6.6 | 7.0 | 16 | - | - | .4 | 14 | 28 | 60 | 10 | 65 | 30 | - | 112 | 2500 |
| 25 | 62 | 2.0 | 12.1 | 6.6 | 6.2 | 42 | - | - | 2.0 | 8 | 24 | 46 | 10 | 170 | 23 | - | 146 | - |
| 2 | 62 | 3.0 | 12.0 | 6.7 | 6.5 | 41 | - | - | 1.4 | 6 | 24 | 48 | 10 | 20 | - | - | 156 | 6000 |
| 9 | 62 | 5.0 | 12.5 | 6.9 | 4.8 | 40 | - | - | .6 | 12 | 31 | 54 | 10 | - | 39 | - | 162 | 170 |
| 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 42 | - | - | *1 |
| 14 | 62 | 5.0 | 12.9 | 6.8 | 6.4 | 32 | - | - | .8 | 16 | 34 | 60 | 60 | 20 | - | - | 132 | - |
| 21 | 62 | 6.0 | 11.5 | 6.8 | 3.7 | 22 | - | - | 1.6 | 15 | 35 | 64 | 10 | 40 | 31 | - | 126 | - |
| 1 | 62 | 9.0 | 11.0 | 6.5 | 3.2 | 110 | - | - | .4 | 14 | 24 | 54 | 10 | 240 | 0 | - | 103 | - |
| 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 60 |
| 23 | 62 | 10.0 | 11.4 | 6.9 | 4.5 | 68 | - | - | .4 | 10 | 19 | 32 | 50 | 210 | - | - | 102 | - |
| 28 | 62 | 9.0 | 10.6 | 7.3 | 3.2 | 75 | - | - | 1.2 | 15 | 23 | 50 | 30 | 10 | - | - | 112 | 2500 |
| 5 | 62 | 13.0 | 9.6 | 7.3 | 4.0 | 52 | - | - | 1.2 | 18 | 32 | 70 | 10 | 10 | 34 | - | 128 | - |
| 18 | 62 | - | - | - | - | - | - | - | - | - | 18 | - | - | - | 26 | - | - | - |
| 25 | 62 | 16.0 | 8.0 | 6.9 | 5.8 | 8 | - | - | 1.2 | 23 | 32 | 68 | 10 | 10 | 35 | - | 162 | 450 |
| 4 | 62 | 20.0 | 6.6 | 7.0 | - | 12 | - | - | 1.6 | 22 | 36 | 66 | 5 | 15 | - | - | 168 | - |
| 10 | 62 | 21.0 | 3.4 | 6.6 | 3.3 | 28 | - | - | 3.2 | 33 | 37 | 95 | 10 | 5 | 29 | - | - | 880 |
| 17 | 62 | 22.0 | .6 | 6.5 | 7.2 | 32 | - | - | 4.0 | 41 | 34 | 100 | 5 | 4 | - | - | 162 | 600 |
| 24 | 62 | 22.0 | .0 | 7.3 | 6.0 | 67 | - | - | 3.2 | 45 | 59 | 90 | 5 | 5 | 38 | - | - | - |
| 31 | 62 | 27.5 | .0 | 7.0 | 15.6 | 48 | - | - | 1.6 | 37 | 43 | 98 | 5 | 148 | 48 | - | 210 | 8 |
| 8 | 62 | 27.0 | .0 | 6.8 | 8.4 | 16 | - | - | 3.2 | 56 | 50 | 122 | 10 | 8 | 19 | - | - | - |
| 14 | 62 | - | .0 | 6.8 | 8.4 | 16 | - | - | 2.8 | 43 | 39 | 82 | 50 | 30 | 14 | - | - | - |
| 5 | 62 | 26.0 | .0 | 6.7 | - | 16 | - | - | - | 51 | 47 | 112 | - | 25 | - | - | - | - |
| 11 | 62 | 26.0 | .0 | 6.8 | 4.2 | 61 | - | - | - | 40 | 49 | 90 | - | 10 | - | - | - | 2700 |
| 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 41 | - | - | - |
| 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 610 |
| 26 | 62 | 26.0 | .0 | 7.3 | 8.4 | 33 | - | - | 2.4 | 58 | 43 | 102 | 20 | 10 | - | - | - | - |
| 3 | 62 | 26.8 | .1 | 6.9 | 8.0 | 14 | - | - | 2.4 | 35 | 45 | 84 | 20 | 15 | - | - | - | - |
| 8 | 62 | 28.0 | .0 | 7.1 | 3.6 | 25 | - | - | 3.2 | 48 | 50 | 114 | 15 | 12 | - | - | - | 9100 |
| 10 | 62 | - | - | - | - | - | - | - | - | - | 2 | - | - | - | 90 | - | - | - |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** WEST VIRGINIA
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** KANAWHA RIVER
**STATION LOCATION** KANAWHA RIVER AT
WINFIELD DAM, WEST VIRGINIA 68

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 8 | 16 | 62 | 27.0 | .0 | 7.2 | 8.9 | 16 | - | - | 6.4 | 49 | 63 | 112 | 10 | 13 | - | - | - | 13000 |
| 8 | 23 | 62 | 28.0 | .0 | 7.2 | - | 35 | - | - | 6.4 | 85 | 59 | 136 | 13 | 5 | - | - | - | 5500 |
| 8 | 29 | 62 | 28.0 | .0 | 7.3 | 18.1 | 39 | - | - | 9.6 | 87 | 65 | 142 | 15 | 8 | 43 | - | - | 580 |
| 9 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 60 | - | - | - |
| 9 | 6 | 62 | - | .0 | 7.2 | 17.5 | 58 | - | - | 9.6 | 101 | 68 | 166 | 5 | 12 | 24 | - | - | 300 |
| 9 | 7 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 70 | - | - | - |
| 9 | 13 | 62 | 30.0 | .0 | 7.0 | 31.0 | 76 | - | - | 12.8 | 122 | 51 | 182 | 10 | 15 | 29 | - | - | *33 |
| 9 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1400 |
| 9 | 20 | 62 | 26.9 | .0 | 7.2 | 13.3 | 56 | - | - | 9.6 | 90 | 64 | 158 | 10 | 9 | 38 | - | - | - |
| 9 | 26 | 62 | 23.2 | .0 | 7.0 | 11.0 | 40 | - | - | 8.0 | 68 | 67 | 122 | 10 | 9 | 19 | - | - | 3700 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Charleston, West Virginia
Operated by U.S. Geological Survey

STATE West Virginia

MAJOR BASIN Ohio River

MINOR BASIN Kanawha River

STATION LOCATION Kanawha River at Winfield Dam, West Virginia

| October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|

DATA NOT AVAILABLE AT PRESENT TIME

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** OREGON

**MAJOR BASIN** CALIFORNIA

**MINOR BASIN** KLAMATH RIVER

**STATION LOCATION** KLAMATH RIVER NEAR
KENO, OREGON

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BET |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g |
| 10 | 3 | 61 | 10 | 27 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 4 | 9 | 5 | 11 | 6 | | | | | |
| 10 | 17 | 61 | 10 | 30 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 5 | 6 | 5 | 11 | 7 | | | | | |
| 10 | 23 | 61 | 11 | 7 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 5 | 14 | 5 | 22 | 7 | | | | | |
| 10 | 31 | 61 | 11 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 4 | 18 | 5 | 21 | 6 | | | | | |
| 11 | 7 | 61 | 11 | 27 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 4 | 18 | 6 | 21 | 7 | | | | | |
| 11 | 14 | 61 | 12 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 5 | 8 | 5 | 16 | 7 | | | | | |
| 11 | 23 | 61 | 12 | 8 | 0 | 1 | 0 | 1 | 0 | 1 | 12 | 5 | 14 | 7 | 26 | 9 | | | | | |
| 11 | 28 | 61 | 12 | 8 | 0 | 1 | 0 | 1 | 0 | 1 | 22 | 5 | 17 | 7 | 39 | 9 | | | | | |
| 12 | 5 | 61 | 12 | 19 | 0 | 1 | 0 | 1 | 0 | 1 | 24 | 5 | 20 | 5 | 44 | 7 | | | | | |
| 12 | 11 | 61 | 12 | 26 | 0 | 1 | 0 | 1 | 0 | 1 | 30 | 5 | 23 | 5 | 53 | 7 | | | | | |
| 12 | 18 | 61 | 1 | 3 | 0 | 1 | 0 | 1 | 0 | 1 | 38 | 5 | 25 | 6 | 63 | 8 | | | | | |
| 12 | 26 | 61 | 1 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 43 | 5 | 30 | 6 | 73 | 8 | | | | | |
| 1 | 2 | 62 | 1 | 24 | – | – | – | – | – | – | 9 | 5 | 20 | 7 | 29 | 9 | | | | | |
| 1 | 8 | 62 | 1 | 26 | – | – | – | – | – | – | 30 | 6 | 20 | 6 | 50 | 8 | | | | | |
| 1 | 16 | 62 | 1 | 29 | – | – | – | – | – | – | 18 | 6 | 23 | 7 | 41 | 9 | | | | | |
| 1 | 23 | 62 | 2 | 9 | 1 | 1 | 1 | 1 | 2 | 1 | 21 | 5 | 23 | 5 | 44 | 7 | | | | | |
| 1 | 30 | 62 | 2 | 13 | – | – | – | – | – | – | 6 | 5 | 20 | 7 | 26 | 9 | | | | | |
| 2 | 6 | 62 | 2 | 19 | – | – | – | – | – | – | 12 | 6 | 18 | 7 | 30 | 9 | | | | | |
| 2 | 14 | 62 | 3 | 5 | – | – | – | – | – | – | 205 | 15 | 55 | 12 | 260 | 19 | | | | | |
| 2 | 20 | 62 | 3 | 6 | – | – | – | – | – | – | 227 | 17 | 85 | 8 | 312 | 19 | | | | | |
| 3 | 1 | 62 | 3 | 14 | 0 | 1 | 0 | 1 | 0 | 1 | 72 | 6 | 45 | 6 | 117 | 9 | | | | | |
| 3 | 5 | 62 | 3 | 26 | – | – | – | – | – | – | 28 | 6 | 32 | 8 | 60 | 10 | | | | | |
| 3 | 13 | 62 | 3 | 30 | – | – | – | – | – | – | 26 | 6 | 37 | 8 | 63 | 10 | | | | | |
| 3 | 20 | 62 | 4 | 5 | – | – | – | – | – | – | 25 | 7 | 52 | 8 | 77 | 11 | | | | | |
| 3 | 27 | 62 | 4 | 12 | 0 | 0 | 0 | 1 | 0 | 1 | 33 | 5 | 35 | 6 | 68 | 7 | | | | | |
| 4 | 2 | 62 | 4 | 19 | – | – | – | – | – | – | 19 | 6 | 29 | 8 | 48 | 10 | | | | | |
| 4 | 11 | 62 | 4 | 25 | – | – | – | – | – | – | 24 | 6 | 29 | 7 | 53 | 8 | | | | | |
| 4 | 17 | 62 | 4 | 30 | – | – | – | – | – | – | 12 | 5 | 28 | 8 | 40 | 9 | | | | | |
| 4 | 24 | 62 | 5 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 5 | 21 | 7 | 31 | 9 | | | | | |
| 4 | 30 | 62 | 6 | 5 | – | – | – | – | – | – | 10 | 6 | 26 | 8 | 36 | 10 | | | | | |
| 5 | 8 | 62 | 6 | 21 | – | – | – | – | – | – | 6 | 7 | 22 | 9 | 28 | 11 | | | | | |
| 5 | 16 | 62 | 6 | 22 | – | – | – | – | – | – | 5 | 3 | 23 | 4 | 28 | 5 | | | | | |
| 5 | 22 | 62 | 6 | 27 | – | – | – | – | – | – | 8 | 6 | 21 | 7 | 29 | 8 | | | | | |
| 5 | 30 | 62 | 7 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 7 | 10 | 8 | 11 | 11 | | | | | |
| 6 | 6 | 62 | 7 | 11 | – | – | – | – | – | – | 2 | 6 | 11 | 7 | 13 | 9 | | | | | |
| 6 | 19 | 62 | 7 | 20 | – | – | – | – | – | – | 4 | 3 | 19 | 4 | 23 | 5 | | | | | |
| 6 | 26 | 62 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 6 | 45 | 7 | 113 | 9 | | | | | |
| 7 | 3 | 65 | 8 | 1 | – | – | – | – | – | – | 5 | 7 | 13 | 7 | 18 | 10 | | | | | |
| 7 | 9 | 62 | 8 | 2 | – | – | – | – | – | – | 0 | 6 | 10 | 6 | 10 | 8 | | | | | |
| 7 | 16 | 62 | 8 | 20 | – | – | – | – | – | – | 0 | 3 | 13 | 2 | 13 | 3 | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** OREGON
**MAJOR BASIN** CALIFORNIA
**MINOR BASIN** KLAMATH RIVER
**STATION LOCATION** KLAMATH RIVER NEAR
KENO, OREGON 78

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 7 | 24 | 62 | 8 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 10 | 6 | 13 | 7 | | | | | | |
| 7 | 31 | 62 | 10 | 13 | - | - | - | - | - | - | 2 | 6 | 10 | 6 | 12 | 8 | | | | | | |
| 8 | 8 | 62 | 8 | 31 | - | - | - | - | - | - | 4 | 5 | 8 | 6 | 12 | 7 | | | | | | |
| 8 | 14 | 62 | 9 | 5 | - | - | - | - | - | - | 2 | 5 | 8 | 6 | 10 | 7 | | | | | | |
| 8 | 21 | 62 | 9 | 6 | - | - | - | - | - | - | 5 | 5 | 14 | 7 | 19 | 9 | | | | | | |
| 8 | 27 | 62 | 9 | 18 | 0 | 1 | 0 | 0 | 0 | 1 | 9 | 4 | 14 | 6 | 23 | 7 | | | | | | |
| 9 | 4 | 62 | 10 | 13 | - | - | - | - | - | - | 4 | 5 | 11 | 6 | 15 | 8 | | | | | | |
| 9 | 11 | 62 | 10 | 9 | - | - | - | - | - | - | 5 | 5 | 7 | 6 | 12 | 7 | | | | | | |
| 9 | 18 | 62 | 10 | 16 | - | - | - | - | - | - | 2 | 5 | 11 | 6 | 13 | 7 | | | | | | |
| 9 | 25 | 62 | 10 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 10 | 6 | 11 | 7 | | | | | | |

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE - GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 3 | 61 | 8600 | 3870 | 0 | 700 | 0 | 60 | 0 | 2010 | 1930 | 1300 | 1640 | 1 | 4 | 71 | 4 | 3 | 3 | 84 | 3 | 25 | 2 | 69 | 1 | 87 | 1 | 68 | 1 | 79 | 1 | | |
| 10 | 17 | 61 | 3700 | 2170 | 20 | 130 | 0 | 100 | 0 | 660 | 700 | 190 | 620 | 2 | 4 | 3 | 2 | 71 | 2 | 1 | 2 | 84 | 1 | | | | | | | | | | |
| 11 | 7 | 61 | 19800 | 8700 | 100 | 850 | 0 | 230 | 0 | 7310 | 2650 | 4060 | 2710 | 2 | 6 | 5 | 5 | 1 | 3 | 84 | 4 | 71 | 3 | 69 | 2 | 88 | 1 | 68 | 1 | 25 | 1 | 38 | 1 |
| 11 | 23 | 61 | 3700 | 1390 | 40 | 190 | 0 | 20 | 0 | 1410 | 660 | 1160 | 1390 | 3 | 3 | 71 | 3 | 84 | 2 | 69 | 1 | | | | | | | | | | | | |
| 12 | 5 | 61 | 40100 | 26460 | 540 | 9270 | 0 | 320 | 180 | 1710 | 1620 | 8690 | 6480 | 3 | 7 | 1 | 6 | 25 | 6 | 44 | 5 | 2 | 5 | 71 | 4 | 84 | 3 | 15 | 2 | 31 | 2 | 51 | 1 |
| 12 | 18 | 61 | 18100 | 13950 | 0 | 910 | 0 | 120 | 0 | 1410 | 1680 | 2010 | 1930 | 2 | 7 | 3 | 5 | 25 | 3 | 1 | 2 | 84 | 1 | 69 | 1 | | | | | | | | |
| 1 | 2 | 62 | 5600 | 1160 | 0 | 2050 | 0 | 40 | 0 | 1570 | 810 | 1100 | 970 | 71 | 4 | 25 | 4 | 3 | 3 | 84 | 2 | 69 | 1 | | | | | | | | | | |
| 1 | 16 | 62 | 37500 | 5310 | 0 | 15980 | 0 | 230 | 140 | 12920 | 2930 | 4050 | 810 | 25 | 7 | 71 | 6 | 3 | 5 | 24 | 4 | 1 | 3 | 44 | 2 | 84 | 2 | 69 | 2 | 51 | 1 | 68 | 1 |
| 2 | 6 | 62 | 9900 | 2960 | 0 | 5150 | 0 | 60 | 0 | 1200 | 520 | 750 | 580 | 25 | 6 | 3 | 5 | 71 | 3 | 84 | 1 | | | | | | | | | | | | |
| 2 | 20 | 62 | 3200 | 60 | 0 | 1160 | 0 | 120 | 40 | 600 | 1220 | 520 | 2130 | 25 | 3 | 84 | 3 | 71 | 2 | 69 | 1 | | | | | | | | | | | | |
| 3 | 5 | 62 | 28800 | 3310 | 0 | 8410 | 0 | 2440 | 170 | 8890 | 5550 | 3810 | 8840 | 25 | 6 | 51 | 4 | 3 | 4 | 1 | 4 | 88 | 3 | 84 | 3 | 92 | 3 | 44 | 2 | 87 | 2 | 79 | 2 |
| 3 | 20 | 62 | 50100 | 430 | 0 | 1240 | 0 | 250 | 20 | 45790 | 2420 | 3320 | 3170 | 71 | 9 | 68 | 5 | 25 | 3 | 84 | 1 | 88 | 1 | 69 | 1 | 3 | 1 | 1 | 1 | 57 | 1 | | |
| 4 | 2 | 62 | 17300 | 910 | 0 | 1570 | 0 | 790 | 460 | 11180 | 2360 | 2570 | 1530 | 71 | 7 | 3 | 3 | 88 | 3 | 51 | 3 | 25 | 3 | 44 | 2 | 62 | 2 | 87 | 1 | 92 | 1 | 68 | 1 |
| 4 | 17 | 62 | 7000 | 440 | 80 | 1710 | 0 | 0 | 0 | 1920 | 2430 | 4390 | 2930 | 71 | 4 | 82 | 3 | 44 | 2 | 45 | 2 | 88 | 2 | 92 | 1 | 25 | 1 | 35 | 1 | 30 | 1 | 97 | 1 |
| 5 | 8 | 62 | 10200 | 2380 | 0 | 1240 | 20 | 390 | 0 | 3620 | 2570 | 1350 | 830 | 71 | 5 | 3 | 4 | 2 | 3 | 68 | 3 | 25 | 2 | 88 | 2 | 90 | 2 | 51 | 1 | 44 | 1 | 1 | 1 |
| 5 | 22 | 62 | 4800 | 40 | 110 | 760 | 0 | 740 | 0 | 1820 | 1350 | 1140 | 1180 | 71 | 4 | 57 | 3 | 30 | 1 | 24 | 1 | | | | | | | | | | | | |
| 6 | 6 | 62 | 4200 | 890 | 0 | 730 | 0 | 40 | 40 | 520 | 2010 | 830 | 1240 | 25 | 2 | 3 | 2 | 71 | 2 | 88 | 2 | 87 | 1 | 82 | 1 | 90 | 1 | 1 | 1 | 92 | 1 | 2 | 1 |
| 6 | 19 | 62 | 5800 | 130 | 0 | 80 | 0 | 80 | 0 | 3880 | 1650 | 970 | 1690 | 68 | 4 | 71 | 4 | 88 | 2 | 90 | 1 | 82 | 1 | 87 | 1 | | | | | | | | |
| 7 | 2 | 62 | 5500 | 80 | 0 | 1030 | 910 | 330 | 0 | 1740 | 1410 | 830 | 540 | 50 | 3 | 71 | 3 | 69 | 2 | 25 | 2 | 51 | 2 | 88 | 1 | 90 | 1 | 38 | 1 | 44 | 1 | | |
| 7 | 16 | 62 | 1300 | 40 | 0 | 0 | 210 | 60 | 0 | 660 | 370 | 0 | 80 | 68 | 2 | 50 | 1 | 69 | 1 | | | | | | | | | | | | | | |
| 8 | 8 | 62 | 3500 | 730 | 20 | 350 | 0 | 210 | 100 | 460 | 1660 | 540 | 620 | 2 | 3 | 71 | 2 | 87 | 1 | 90 | 1 | 79 | 1 | 82 | 1 | | | | | | | | |
| 8 | 21 | 62 | 1900 | 0 | 0 | 150 | 0 | 310 | 0 | 990 | 460 | 210 | 120 | 68 | 3 | 51 | 2 | 71 | 1 | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 2000 | 20 | 470 | 320 | 0 | 340 | 0 | 230 | 610 | 410 | 20 | 11 | 2 | 71 | 1 | 79 | 1 | 26 | 1 | | | | | | | | | | | | |
| 9 | 18 | 62 | 500 | 70 | 50 | 90 | 0 | 110 | 0 | 140 | 50 | 290 | 650 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | CRUSTACEA NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* 1ST | | 2ND | | 3RD | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 0 | 3 | 61 | 82 | 14 | 46 | 14 | 49 | 9 | 56 | 6 | 57 | 12730 | 10 | 16 | 11 | 1 | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 0 | 17 | 61 | 82 | 29 | 46 | 12 | 49 | 5 | 56 | 5 | 49 | 330 | 0 | 12 | 11 | 1 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 1 | 7 | 61 | 82 | 20 | 84 | 12 | 97 | 12 | 46 | 10 | 46 | 0 | 0 | 113 | 2 | 5 | 11 | 2 | | | | | | | 17 | 77 | 2 | 76 | 1 | | | 0 | 0 |
| 1 | 23 | 61 | 46 | 18 | 84 | 13 | 82 | 8 | 45 | 7 | 54 | 60 | 20 | 372 | 2 | 7 | 11 | 3 | | | | | | | 26 | 77 | 3 | 50 | 2 | 76 | 1 | 1 | 0 |
| 2 | 5 | 61 | 84 | 16 | 46 | 14 | 97 | 13 | 45 | 11 | 46 | 990 | 0 | 333 | 11 | 7 | | | | | | | | | 29 | 50 | 3 | 77 | 3 | | | 0 | 0 |
| 2 | 18 | 61 | 84 | 21 | 46 | 11 | 97 | 9 | 76 | 6 | 53 | 0 | 20 | 78 | 2 | 4 | | | | | | | | | 17 | 50 | 2 | 77 | 2 | | | 0 | 0 |
| 1 | 2 | 62 | 45 | 22 | 46 | 15 | 84 | 12 | 56 | 11 | 40 | 0 | 30 | 50 | 11 | 3 | 2 | 3 | | | | | | | 103 | 50 | 5 | 77 | 3 | | | 0 | 0 |
| 1 | 16 | 62 | 82 | 24 | 84 | 11 | 48 | 10 | 45 | 6 | 49 | 50 | 70 | 95 | 2 | 4 | 11 | 3 | | | | | | | 131 | 50 | 5 | | | | | 0 | 0 |
| 2 | 6 | 62 | 82 | 27 | 46 | 17 | 84 | 11 | 45 | 5 | 40 | 40 | 10 | 161 | 2 | 4 | 11 | 4 | | | | | | | 162 | 50 | 5 | 77 | 4 | 76 | 1 | 0 | 1 |
| 2 | 20 | 62 | 46 | 27 | 84 | 8 | 48 | 7 | 82 | 7 | 51 | 40 | 0 | 12 | 2 | 1 | | | | | | | | | 14 | 50 | 3 | 77 | 1 | | | 1 | 0 |
| 3 | 5 | 62 | 49 | 16 | 49 | 12 | 82 | 8 | 84 | 6 | 58 | 910 | 10 | 173 | 11 | 5 | 2 | 4 | 21 | 1 | | | | | 105 | 50 | 5 | 76 | 2 | 77 | 4 | 0 | 0 |
| 3 | 20 | 62 | 82 | 32 | 46 | 13 | 49 | 12 | 48 | 9 | 34 | 0 | 40 | 249 | 2 | 6 | 11 | 4 | 21 | 1 | 17 | 1 | | | 37 | 50 | 4 | 77 | 1 | 98 | 1 | 2 | 0 |
| 4 | 2 | 62 | 84 | 56 | 48 | 11 | 84 | 6 | 49 | 3 | 24 | 40 | 20 | 1230 | 2 | 8 | 11 | 5 | 17 | 1 | | | | | 57 | 50 | 4 | 76 | 2 | 77 | 2 | 0 | 0 |
| 4 | 17 | 62 | 84 | 26 | 83 | 10 | 36 | 10 | 97 | 8 | 46 | 40 | 0 | 46 | 11 | 3 | 2 | 1 | | | | | | | 13 | 50 | 2 | | | | | 0 | 0 |
| 5 | 8 | 62 | 83 | 24 | 82 | 15 | 30 | 7 | 48 | 5 | 49 | 0 | 10 | 47 | 11 | 3 | 7 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 22 | 62 | 83 | 95 | | | | | | | 5 | 40 | 0 | 49 | 11 | 3 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 6 | 62 | 83 | 43 | 82 | 6 | 76 | 5 | 36 | 4 | 42 | 0 | 0 | 62 | 11 | 3 | 2 | 2 | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 19 | 62 | 82 | 22 | 23 | 15 | 30 | 13 | 76 | 5 | 45 | 0 | 0 | 172 | 11 | 5 | 17 | 3 | 7 | 1 | 21 | 1 | 2 | 1 | 2 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 26 | 15 | 82 | 14 | 76 | 10 | 16 | 6 | 55 | 0 | 0 | 40 | 11 | 3 | 17 | 2 | | | | | | | 22 | 51 | 3 | 76 | 1 | | | 2 | 0 |
| 7 | 16 | 62 | 76 | 19 | 82 | 7 | 46 | 7 | 83 | 6 | 61 | 0 | 0 | 106 | 11 | 4 | 17 | 2 | 15 | 2 | 2 | 1 | 21 | 1 | 22 | 51 | 3 | 52 | 2 | | | 0 | 0 |
| 8 | 8 | 62 | 83 | 46 | 46 | 12 | 76 | 5 | 84 | 4 | 33 | 0 | 0 | 267 | 18 | 6 | 11 | 2 | 17 | 1 | 22 | 1 | | | 11 | 53 | 2 | 50 | 1 | | | 0 | 0 |
| 8 | 21 | 62 | 26 | 40 | 82 | 8 | 76 | 8 | 36 | 5 | 39 | 0 | 0 | 87 | 11 | 3 | 21 | 3 | 16 | 2 | 17 | 1 | 22 | 1 | 4 | 76 | 1 | | | | | 0 | 3 |
| 9 | 4 | 62 | 83 | 49 | 58 | 17 | 16 | 5 | 26 | 5 | 24 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 18 | 62 | 83 | 24 | 16 | 10 | 76 | 8 | 56 | 7 | 51 | 20 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

***RESULTS IN MICROGRAMS PER LITER***
*(Parts per billion)*

**STATION LOCATION** KLAMATH RIVER NEAR
KENO, OREGON

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | |
| 10 | 12 | 61 | 10 | 21 | 5000 | 167 | 61 | 106 | 3 | 15 | 16 | 1 | 1 | 13 | 1 | 7 | 5 | 1 |
| 11 | 7 | 61 | 11 | 16 | 5784 | 132 | 36 | 96 | 2 | 12 | 7 | 1 | 1 | 4 | 1 | 3 | 2 | 1 |
| 12 | 11 | 61 | 12 | 19 | 5490 | 136 | 33 | 103 | 1 | 10 | 9 | 1 | 1 | 6 | 1 | 4 | 2 | 1 |
| 1 | 11 | 62 | 1 | 25 | 4098 | 208 | 48 | 160 | 1 | 13 | 15 | 1 | 1 | 12 | 1 | 6 | 3 | 1 |
| 2 | 13 | 62 | 2 | 21 | 5140 | 174 | 58 | 116 | 1 | 13 | 22 | 1 | 1 | 19 | 1 | 7 | 2 | 1 |
| 3 | 10 | 62 | 3 | 18 | 5173 | 119 | 35 | 84 | 2 | 9 | 11 | 1 | 1 | 9 | 0 | 4 | 2 | 1 |
| 4 | 10 | 62 | 4 | 18 | 5417 | 135 | 54 | 81 | 2 | 17 | 12 | 1 | 1 | 10 | 0 | 5 | 5 | 1 |
| 5 | 11 | 62 | 5 | 20 | 6683 | 161 | 48 | 113 | 1 | 15 | 13 | 1 | 1 | 10 | 1 | 6 | 4 | 1 |
| 6 | 19 | 62 | 6 | 29 | 5482 | 177 | 93 | 84 | 3 | 27 | 21 | 1 | 1 | 17 | 2 | 10 | 10 | 2 |
| 8 | 8 | 62 | 8 | 15 | 5112 | 105 | 42 | 63 | 1 | 12 | 14 | 1 | 1 | 12 | 0 | 4 | 2 | 1 |
| 9 | 11 | 62 | 9 | 20 | 5903 | 141 | 61 | 80 | 2 | 17 | 15 | 1 | 1 | 13 | 0 | 4 | 5 | 1 |

MINOR BASIN KLAMATH RIVER

STATION LOCATION KLAMATH RIVER NEAR

KENO, OREGON 78

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 12 | 61 | 12.0 | 9.3 | 8.6 | 4.9 | 68 | - | - | - | 5 | 60 | 46 | - | 49 | - | - | - | - |
| 10 | 31 | 61 | - | - | - | - | - | - | - | - | - | - | - | 10 | - | 25 | .1 | 158 | - |
| 11 | 6 | 61 | 6.0 | 10.4 | 7.7 | 5.3 | 55 | - | - | - | 6 | 70 | 54 | - | 72 | - | - | - | - |
| 11 | 14 | 61 | - | - | - | - | - | - | - | - | - | - | - | 10 | - | 34 | .1 | 166 | - |
| 11 | 23 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 24 | .1 | 169 | - |
| 11 | 28 | 61 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | 54 | .0 | 205 | - |
| 12 | 11 | 61 | 1.5 | 11.5 | 7.6 | 3.2 | 41 | - | - | - | 6 | 78 | 62 | - | 43 | 35 | .1 | 263 | - |
| 12 | 18 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 43 | .1 | 195 | - |
| 12 | 26 | 61 | - | - | - | - | - | - | - | - | - | - | - | 20 | - | 55 | .1 | - | - |
| 1 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 14 | - | - | - |
| 1 | 9 | 62 | 4.5 | 11.0 | 7.6 | 3.8 | 17 | - | - | - | 4 | 60 | 42 | - | 32 | - | - | - | - |
| 1 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 28 | .3 | - | - |
| 1 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 17 | .0 | - | - |
| 2 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 24 | - | - | - |
| 2 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | 40 | - | 41 | .0 | - | - |
| 2 | 21 | 62 | - | - | - | - | 27 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | 10 | - | 76 | .3 | 269 | - |
| 3 | 26 | 62 | 8.0 | 10.5 | 8.0 | 2.7 | 27 | - | - | - | 7 | 92 | 110 | - | 60 | - | - | - | - |
| 4 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | 35 | - | 64 | .0 | 211 | - |
| 4 | 24 | 62 | 14.0 | 8.9 | 8.2 | 4.2 | 34 | - | - | - | 7 | 68 | 80 | 10 | 32 | 70 | .0 | - | - |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | 10 | - | 60 | .0 | 179 | - |
| 5 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | 60 | .3 | - | - |
| 5 | 22 | 62 | - | - | - | - | - | - | - | - | - | - | - | 20 | - | 40 | - | - | - |
| 6 | 20 | 62 | - | - | - | - | 33 | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 16 | 62 | 19.0 | 8.4 | 8.2 | 1.8 | - | - | - | - | 5 | 60 | 41 | 15 | 25 | 15 | .1 | 105 | - |
| 8 | 1 | 62 | 18.0 | 8.3 | 7.6 | 1.7 | - | - | - | - | 4 | 66 | 50 | - | 25 | - | - | - | - |
| 8 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | - | 20 | - | 20 | .0 | 140 | - |
| 8 | 14 | 62 | - | - | - | - | - | - | - | - | - | - | - | 15 | - | 18 | .0 | 130 | - |
| 9 | 4 | 62 | 17.5 | 8.0 | 7.4 | 2.8 | - | - | - | - | 5 | 70 | 50 | - | - | - | - | - | - |
| 9 | 11 | 62 | - | - | - | - | - | - | - | - | - | - | - | 10 | - | 36 | .2 | - | - |
| 9 | 20 | 62 | - | - | - | - | 23 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 27 | 62 | 14.5 | 8.4 | 7.9 | 2.1 | - | - | - | - | 4 | 70 | 50 | - | 25 | - | - | - | - |

Gaging Station below Big Bend powerplant
near Keno, Oregon
Operated by U.S. Geological Survey

STATION LOCATION Klamath River near
Keno, Oregon

| Day | October | November | December | January | February | March | April | May | June | July | August |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.190 | 2.220 | 2.840 | 2.330 | 1.490 | 1.380 | .892 | 1.400 | 1.050 | .705 | .840 |
| 2 | 1.540 | 2.500 | 2.850 | 2.340 | 1.380 | 1.300 | 1.720 | 1.530 | .590 | .700 | 1.240 |
| 3 | 1.550 | 2.560 | 2.840 | 2.340 | 1.050 | 1.190 | 2.010 | 1.730 | .532 | .712 | 1.050 |
| 4 | 1.550 | 2.700 | 2.810 | 2.340 | 1.040 | .792 | 2.230 | 1.420 | .992 | .714 | .837 |
| 5 | 1.540 | 2.750 | 2.310 | 2.210 | 1.460 | 1.370 | 2.420 | 1.170 | .872 | .707 | .766 |
| 6 | 1.600 | 2.810 | 2.400 | 2.010 | 1.260 | 1.290 | 2.850 | .850 | .804 | .600 | .972 |
| 7 | 1.270 | 2.780 | 2.330 | 1.970 | 1.230 | 1.330 | 2.840 | 1.360 | .790 | .708 | .876 |
| 8 | 1.160 | 2.770 | 2.480 | 1.940 | 1.110 | 1.390 | 2.820 | 1.060 | .740 | .707 | .862 |
| 9 | 1.540 | 2.300 | 2.650 | 1.890 | 1.140 | 1.550 | 2.840 | 1.500 | .698 | .724 | .786 |
| 10 | 1.590 | 2.630 | 2.640 | 1.880 | 1.560 | 1.190 | 2.710 | 1.570 | .688 | .720 | .788 |
| 11 | 1.720 | 1.690 | 2.710 | 1.880 | 2.120 | 1.080 | 2.820 | 1.230 | .728 | .689 | .746 |
| 12 | 1.680 | 2.300 | 2.610 | 1.880 | 2.480 | 1.320 | 2.820 | 1.190 | .711 | .722 | .755 |
| 13 | 1.730 | 2.770 | 2.280 | 1.870 | 1.430 | 1.250 | 2.810 | .824 | .708 | .720 | .854 |
| 14 | 1.600 | 2.810 | 2.330 | 1.880 | 1.380 | 1.310 | 2.760 | 1.460 | .716 | .718 | .852 |
| 15 | 1.420 | 2.800 | 2.340 | 1.800 | 1.230 | 1.300 | 2.750 | 1.540 | .716 | .704 | .880 |
| 16 | 1.800 | 2.800 | 2.210 | 1.760 | 1.360 | 1.420 | 2.800 | 1.580 | .720 | .706 | .785 |
| 17 | 1.890 | 2.180 | 2.160 | 1.740 | 1.190 | 1.130 | 2.810 | 1.420 | .705 | .686 | .785 |
| 18 | 1.990 | 2.290 | 2.150 | 1.390 | .769 | .942 | 2.820 | 1.420 | .702 | .710 | .740 |
| 19 | 2.020 | 2.820 | 1.730 | 1.490 | 1.490 | 1.380 | 1.950 | .950 | .706 | .707 | .733 |
| 20 | 2.130 | 2.820 | 1.370 | 1.300 | 1.310 | 1.400 | 1.750 | .632 | .701 | .700 | .759 |
| 21 | 1.910 | 2.850 | 1.060 | 1.570 | 1.350 | 1.470 | 1.820 | .950 | .698 | .704 | .778 |
| 22 | 1.760 | 2.400 | 1.440 | 2.150 | 1.330 | 1.240 | 1.580 | .971 | .702 | .700 | .950 |
| 23 | 2.180 | 1.370 | 1.640 | 2.330 | .747 | 1.460 | 1.990 | 1.040 | .702 | .687 | .980 |
| 24 | 2.300 | 1.490 | 1.620 | 2.240 | .616 | 1.150 | 2.030 | 1.060 | .656 | .670 | .920 |
| 25 | 2.220 | 1.440 | 1.610 | 2.220 | .851 | .860 | 1.870 | .978 | .721 | .689 | .650 |
| 26 | 2.110 | 1.530 | 1.960 | 2.180 | 1.510 | 1.410 | 1.720 | .546 | .727 | .706 | .650 |
| 27 | 2.280 | 2.150 | 2.360 | 1.620 | 1.310 | 1.570 | 1.740 | .796 | .714 | .713 | .880 |
| 28 | 2.090 | 2.400 | 2.340 | 1.380 | 1.400 | 1.690 | 1.240 | 1.110 | .697 | .714 | .930 |
| 29 | 2.170 | 2.850 | 2.340 | 1.630 |  | 1.740 | .756 | 1.090 | .684 | .701 | 1.170 |
| 30 | 2.420 | 2.840 | 2.330 | 1.580 |  | 1.860 | 1.480 | .738 | .680 | .712 | 1.120 |
| 31 | 2.190 |  | 2.320 | 1.580 |  | 1.410 |  | 1.090 |  | .747 | .980 |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 3 | 61 | 10 | 27 | 5000 | 253 | 51 | 202 | 1 | 8 | 27 | 5 | 3 | 17 | 2 | 8 | 3 | 1 | 3 |
| 11 | 1 | 61 | 11 | 21 | 5000 | 358 | 146 | 212 | 4 | 20 | 63 | 15 | 9 | 37 | 2 | 25 | 12 | 3 | 19 |
| 12 | 11 | 61 | 12 | 28 | 5000 | 267 | 99 | 168 | 5 | 19 | 34 | 5 | 3 | 22 | 4 | 12 | 8 | 2 | 19 |
| 1 | 8 | 62 | 1 | 26 | 4957 | 189 | 44 | 145 | 0 | 3 | 31 | 10 | 5 | 15 | 1 | 4 | 1 | 0 | 5 |
| 2 | 1 | 62 | 3 | 7 | 5000 | 224 | 35 | 189 | 0 | 6 | 15 | 2 | 2 | 11 | 0 | 7 | 2 | 0 | 5 |
| 4 | 2 | 62 | 4 | 12 | 4605 | 186 | 51 | 135 | 1 | 12 | 21 | 3 | 2 | 16 | 0 | 7 | 3 | 1 | 6 |
| 5 | 8 | 62 | 5 | 21 | 5125 | 276 | 144 | 132 | 4 | 35 | 62 | 14 | 8 | 37 | 3 | 23 | 12 | 3 | 5 |
| 6 | 5 | 62 | 6 | 15 | 5750 | 237 | 112 | 125 | 2 | 20 | 51 | 14 | 7 | 29 | 1 | 19 | 8 | 1 | 11 |
| 7 | 3 | 62 | 7 | 11 | 5643 | 195 | 87 | 108 | 2 | 17 | 35 | 7 | 3 | 23 | 2 | 15 | 7 | 2 | 9 |
| 8 | 1 | 62 | 8 | 8 | 5003 | 148 | 63 | 85 | 1 | 9 | 30 | 8 | 3 | 19 | 0 | 12 | 2 | 1 | 8 |
| 9 | 5 | 62 | 9 | 12 | 4868 | 159 | 56 | 103 | 1 | 7 | 33 | 9 | 4 | 19 | 1 | 7 | 1 | 1 | 6 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** OHIO
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** LITTLE MIAMI RIVER
**STATION LOCATION** LITTLE MIAMI RIVER AT CINCINNATI, OHIO

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g |
| 10 | 3 | 61 | 10 | 9 | 0 | 1 | 0 | 2 | 0 | 2 | 15 | 9 | 17 | 11 | 32 | 14 | | | | | |
| 10 | 10 | 61 | 10 | 16 | 1 | 1 | 1 | 2 | 2 | 2 | 4 | 8 | 16 | 11 | 20 | 14 | | | | | |
| 10 | 17 | 61 | 10 | 31 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 4 | 11 | 6 | 13 | 7 | | | | | |
| 10 | 24 | 61 | 10 | 31 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 8 | 14 | 10 | 14 | 13 | | | | | |
| 10 | 31 | 61 | 11 | 6 | 0 | 1 | 2 | 2 | 2 | 2 | 13 | 8 | 21 | 11 | 34 | 14 | | | | | |
| 11 | 7 | 61 | 11 | 15 | 0 | 1 | 1 | 2 | 1 | 2 | 0 | 8 | 28 | 11 | 28 | 14 | | | | | |
| 11 | 14 | 61 | 11 | 27 | 0 | 2 | 0 | 2 | 0 | 3 | 115 | 13 | 108 | 12 | 223 | 18 | | | | | |
| 11 | 21 | 61 | 11 | 29 | 1 | 1 | 2 | 2 | 3 | 2 | 9 | 11 | 21 | 14 | 30 | 18 | | | | | |
| 11 | 28 | 61 | 12 | 5 | 1 | 1 | 0 | 2 | 1 | 2 | 31 | 11 | 43 | 14 | 74 | 18 | | | | | |
| 12 | 5 | 61 | 12 | 8 | 1 | 1 | 0 | 1 | 1 | 1 | 62 | 10 | 59 | 11 | 121 | 15 | | | | | |
| 12 | 12 | 61 | 12 | 18 | 0 | 3 | 0 | 2 | 0 | 4 | 55 | 8 | 56 | 7 | 111 | 11 | | | | | |
| 12 | 19 | 61 | 12 | 26 | 1 | 1 | 0 | 1 | 1 | 1 | 45 | 6 | 44 | 6 | 89 | 8 | | | | | |
| 12 | 26 | 61 | 1 | 3 | 0 | 1 | 0 | 2 | 0 | 2 | 33 | 5 | 40 | 7 | 73 | 9 | | | | | |
| 1 | 2 | 62 | 1 | 9 | – | – | – | – | – | – | 6 | 10 | 13 | 14 | 19 | 17 | | | | | |
| 1 | 9 | 62 | 1 | 15 | – | – | – | – | – | – | 45 | 6 | 49 | 7 | 94 | 9 | | | | | |
| 1 | 16 | 62 | 1 | 22 | 2 | 2 | 0 | 1 | 2 | 2 | 236 | 11 | 115 | 8 | 351 | 14 | | | | | |
| 1 | 23 | 62 | 1 | 30 | – | – | – | – | – | – | 115 | 10 | 56 | 7 | 171 | 12 | | | | | |
| 1 | 30 | 62 | 2 | 6 | – | – | – | – | – | – | 22 | 6 | 36 | 8 | 58 | 10 | | | | | |
| 2 | 6 | 62 | 2 | 13 | – | – | – | – | – | – | 33 | 11 | 25 | 13 | 58 | 17 | | | | | |
| 2 | 13 | 62 | 2 | 19 | – | – | – | – | – | – | 0 | 11 | 25 | 14 | 25 | 18 | | | | | |
| 2 | 20 | 62 | 2 | 28 | 0 | 1 | 0 | 2 | 0 | 2 | 31 | 5 | 46 | 7 | 77 | 9 | | | | | |
| 2 | 27 | 62 | 3 | 9 | – | – | – | – | – | – | 70 | 8 | 44 | 7 | 114 | 11 | | | | | |
| 3 | 6 | 62 | 3 | 14 | – | – | – | – | – | – | 22 | 8 | 47 | 7 | 69 | 11 | | | | | |
| 4 | 4 | 62 | 4 | 19 | – | – | – | – | – | – | 39 | 6 | 47 | 8 | 86 | 10 | | | | | |
| 4 | 9 | 62 | 4 | 20 | – | – | – | – | – | – | 0 | 16 | 48 | 14 | 48 | 21 | | | | | |
| 4 | 16 | 62 | 4 | 24 | 1 | 1 | 0 | 2 | 1 | 2 | 4 | 8 | 30 | 10 | 34 | 13 | | | | | |
| 4 | 23 | 62 | 4 | 30 | – | – | – | – | – | – | 16 | 11 | 33 | 15 | 49 | 19 | | | | | |
| 4 | 30 | 62 | 5 | 31 | – | – | – | – | – | – | 16 | 13 | 0 | 13 | 16 | 18 | | | | | |
| 5 | 7 | 62 | 6 | 5 | – | – | – | – | – | – | 7 | 13 | 37 | 18 | 44 | 22 | | | | | |
| 5 | 14 | 62 | 7 | 11 | – | – | – | – | – | – | 9 | 12 | 13 | 14 | 22 | 18 | | | | | |
| 5 | 21 | 62 | 6 | 25 | 0 | 1 | 0 | 1 | 0 | 1 | 37 | 14 | 41 | 17 | 78 | 22 | | | | | |
| 5 | 28 | 62 | 6 | 27 | – | – | – | – | – | – | 153 | 39 | 68 | 9 | 221 | 40 | | | | | |
| 6 | 6 | 62 | 7 | 2 | – | – | – | – | – | – | 37 | 13 | 30 | 14 | 67 | 19 | | | | | |
| 6 | 13 | 62 | 7 | 9 | – | – | – | – | – | – | 13 | 12 | 25 | 15 | 38 | 19 | | | | | |
| 6 | 20 | 62 | 7 | 17 | 1 | 1 | 2 | 2 | 3 | 2 | 9 | 9 | 25 | 13 | 34 | 16 | | | | | |
| 6 | 27 | 62 | 7 | 20 | – | – | – | – | – | – | 28 | 11 | 58 | 13 | 86 | 17 | | | | | |
| 7 | 3 | 62 | 7 | 31 | – | – | – | – | – | – | 38 | 15 | 52 | 17 | 90 | 23 | | | | | |
| 7 | 11 | 62 | 8 | 6 | – | – | – | – | – | – | 3 | 4 | 20 | 6 | 23 | 7 | | | | | |
| 7 | 18 | 62 | 8 | 6 | 2 | 2 | 0 | 1 | 2 | 2 | 99 | 13 | 76 | 10 | 175 | 16 | | | | | |
| 7 | 25 | 62 | 8 | 15 | – | – | – | – | – | – | 14 | 11 | 42 | 15 | 56 | 19 | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** OHIO
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** LITTLE MIAMI RIVER
**STATION LOCATION** LITTLE MIAMI RIVER AT
CINCINNATI, OHIO

90

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | | | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 1 | 62 | 8 | 22 | - | - | - | - | - | - | 1 | 11 | 24 | 13 | 25 | 17 | | | | | | | | |
| 8 | 8 | 62 | 8 | 23 | - | - | - | - | - | - | 15 | 11 | 8 | 11 | 23 | 16 | | | | | | | | |
| 8 | 15 | 62 | 8 | 29 | - | - | - | - | - | - | 0 | 11 | 17 | 14 | 17 | 18 | | | | | | | | |
| 8 | 22 | 62 | 9 | 5 | - | - | - | - | - | - | 2 | 6 | 16 | 7 | 18 | 9 | | | | | | | | |
| 8 | 29 | 62 | 10 | 24 | - | - | - | - | - | - | 12 | 12 | 7 | 14 | 19 | 18 | | | | | | | | |
| 9 | 5 | 62 | 9 | 24 | - | - | - | - | - | - | 7 | 12 | 4 | 18 | 11 | 22 | | | | | | | | |
| 9 | 12 | 62 | 10 | 4 | - | - | - | - | - | - | 32 | 11 | 83 | 15 | 115 | 19 | | | | | | | | |
| 9 | 19 | 62 | 10 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 11 | 10 | 13 | 13 | 17 | | | | | | | | |
| 9 | 26 | 62 | 10 | 15 | - | - | - | - | - | - | 20 | 11 | 21 | 14 | 41 | 18 | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** OHIO
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** LITTLE MIAMI RIVER
**STATION LOCATION** LITTLE MIAMI RIVER AT
CINCINNATI, OHIO

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See* | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | |
| MONTH | DAY | YEAR | TOTAL | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 3 | 61 | 1500 | 0 | 0 | 110 | 0 | 200 | 20 | 980 | 200 | 1100 | 380 | 68 | 3 | 71 | 2 | 57 | 1 | | | | | | | | | | |
| 10 | 17 | 61 | 5200 | 40 | 40 | 370 | 0 | 310 | 0 | 2530 | 1930 | 580 | 500 | 68 | 4 | 82 | 3 | 69 | 2 | 71 | 2 | 81 | 2 | 80 | 1 | 87 | 1 | | |
| 10 | 31 | 61 | 3300 | 0 | 0 | 160 | 0 | 1500 | 70 | 580 | 980 | 960 | 270 | 51 | 3 | 82 | 3 | 57 | 2 | | | | | | | | | | |
| 11 | 21 | 61 | 800 | 0 | 0 | 0 | 0 | 40 | 0 | 580 | 170 | 0 | 20 | 68 | 2 | | | | | | | | | | | | | | |
| 12 | 5 | 61 | 800 | 20 | 50 | 20 | 0 | 180 | 0 | 110 | 410 | 20 | 110 | 51 | 1 | | | | | | | | | | | | | | |
| 12 | 19 | 61 | 1100 | 0 | 0 | 0 | 0 | 40 | 0 | 20 | 990 | 0 | 190 | 87 | 2 | 82 | 1 | 88 | 1 | | | | | | | | | | |
| 1 | 2 | 62 | 600 | 0 | 0 | 60 | 0 | 40 | 0 | 330 | 150 | 0 | 40 | | | | | | | | | | | | | | | | |
| 1 | 16 | 62 | 1800 | 0 | 20 | 0 | 0 | 0 | 20 | 70 | 1720 | 380 | 2080 | 82 | 3 | 92 | 1 | 87 | 1 | | | | | | | | | | |
| 2 | 6 | 62 | 300 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 250 | 20 | 200 | | | | | | | | | | | | | | | | |
| 3 | 6 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 90 | 0 | 110 | | | | | | | | | | | | | | | | |
| 4 | 4 | 62 | 700 | 0 | 0 | 20 | 0 | 40 | 40 | 20 | 560 | 0 | 20 | 91 | 1 | 85 | 1 | | | | | | | | | | | | |
| 4 | 17 | 62 | 1700 | 0 | 0 | 80 | 0 | 0 | 360 | 950 | 300 | 80 | 110 | 71 | 3 | 60 | 2 | | | | | | | | | | | | |
| 5 | 7 | 62 | 43500 | 0 | 210 | 1860 | 0 | 590 | 0 | 38800 | 2030 | 460 | 420 | 71 | 8 | 68 | 5 | 40 | 3 | 88 | 2 | 87 | 2 | 44 | 2 | 85 | 2 | 51 | 1 |
| 5 | 21 | 62 | 10200 | 80 | 1010 | 3760 | 0 | 760 | 0 | 3590 | 1010 | 1010 | 1520 | 68 | 5 | 24 | 4 | 17 | 3 | 25 | 3 | 57 | 2 | 45 | 2 | 38 | 1 | 51 | 1 |
| 6 | 6 | 62 | 37500 | 660 | 0 | 3850 | 0 | 3730 | 210 | 22150 | 6960 | 4970 | 620 | 68 | 8 | 51 | 5 | 87 | 3 | 79 | 3 | 38 | 3 | 25 | 3 | 41 | 3 | 3 | 3 |
| 6 | 20 | 62 | 69300 | 4180 | 0 | 6250 | * | 4600 | 950 | 35940 | 3060 | 8240 | 540 | 68 | 8 | 50 | 7 | 71 | 6 | 51 | 5 | 24 | 5 | 4 | 4 | 9 | 4 | 88 | 3 |
| 7 | 3 | 62 | 112100 | 1900 | 250 | 6050 | * | 4060 | 290 | 76630 | 4970 | 14740 | 1330 | 50 | 7 | 51 | 5 | 68 | 5 | 38 | 4 | 25 | 4 | 44 | 3 | 87 | 3 | 3 | 2 |
| 7 | 18 | 62 | 7500 | 0 | 0 | 110 | * | 0 | 0 | 2190 | 3670 | 1270 | 2110 | 68 | 4 | 48 | 4 | 87 | 2 | 92 | 2 | 88 | 1 | | | | | | |
| 8 | 8 | 62 | 132100 | 1120 | 80 | 66860 | * | 7660 | 540 | 40370 | 3110 | 10760 | 410 | 24 | 9 | 68 | 9 | 50 | 7 | 51 | 6 | 25 | 5 | 69 | 4 | 9 | 3 | 71 | 3 |
| 8 | 22 | 62 | 161000 | 2460 | 190 | 7470 | * | 4620 | 190 | 97460 | 14280 | 23180 | 620 | 68 | 9 | 50 | 8 | 88 | 7 | 71 | 5 | 51 | 5 | 38 | 5 | 87 | 5 | 24 | 5 |
| 9 | 5 | 62 | 133700 | 14730 | 300 | 11310 | * | 1220 | 130 | 79460 | 8820 | 16040 | 2410 | 68 | 9 | 71 | 8 | 50 | 7 | 4 | 6 | 69 | 6 | 88 | 6 | 2 | 5 | 38 | 4 |
| 9 | 19 | 62 | 89700 | 1160 | 16890 | 4930 | * | 10850 | 950 | 49230 | 3810 | 17430 | 830 | 71 | 7 | 16 | 7 | 68 | 7 | 69 | 7 | 51 | 7 | 25 | 4 | 50 | 4 | 88 | 4 |
| *6 | 20 | 62 | | | | | 14280 | | | | | | | | | | | | | | | | | | | | | | |
| *7 | 3 | 62 | | | | | 17970 | | | | | | | | | | | | | | | | | | | | | | |
| *7 | 18 | 62 | | | | | 1560 | | | | | | | | | | | | | | | | | | | | | | |
| *8 | 8 | 62 | | | | | 12380 | | | | | | | | | | | | | | | | | | | | | | |
| *8 | 22 | 62 | | | | | 34360 | | | | | | | | | | | | | | | | | | | | | | |
| *9 | 5 | 62 | | | | | 17770 | | | | | | | | | | | | | | | | | | | | | | |
| *9 | 19 | 62 | | | | | 1860 | | | | | | | | | | | | | | | | | | | | | | |

# PLANKTON POPULATION

**STATE** OHIO
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** LITTLE MIAMI RIVER
**STATION LOCATION** LITTLE MIAMI RIVER AT
CINCINNATI, OHIO 090

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | | |
| | | | | | | | | | | | | | | | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA *(Identifiable) Number per ml.* | NUMBER PER LITER | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | NUMBER PER LITER | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| 10 | 3 | 61 | 26 | 29 | 82 | 24 | 27 | 12 | 23 | 11 | 24 | 90 | 0 | 25 | 18 | 2 | 15 | 1 | | | | | | | 0 | | | | | | | 1 | 1 |
| 10 | 17 | 61 | 36 | 23 | 26 | 15 | 82 | 13 | 21 | 9 | 40 | 0 | 0 | 15 | 2 | 2 | | | | | | | | | 0 | | | | | | | 0 | 6 |
| 10 | 31 | 61 | 36 | 90 | 26 | 2 | 65 | 2 | 64 | 2 | 4 | 0 | 0 | 7 | | | | | | | | | | | 1 | | | | | | | 0 | 1 |
| 11 | 21 | 61 | 26 | 53 | 36 | 14 | 64 | 11 | 65 | 4 | 18 | 0 | 0 | 9 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 5 | 61 | 36 | 35 | 65 | 7 | 92 | 4 | 64 | 3 | 51 | 110 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 19 | 61 | 36 | 18 | 65 | 17 | 64 | 11 | 71 | 9 | 45 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 36 | 23 | 65 | 16 | 71 | 10 | 70 | 5 | 46 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 16 | 62 | 36 | 51 | 92 | 8 | 65 | 7 | 62 | 5 | 29 | 90 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 6 | 62 | 65 | 23 | 36 | 14 | 86 | 5 | 92 | 4 | 54 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 6 | 62 | 36 | 19 | 65 | 16 | 64 | 12 | 70 | 4 | 49 | 90 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 2 | 6 |
| 4 | 4 | 62 | 86 | 23 | 65 | 13 | 52 | 12 | 51 | 9 | 43 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 17 | 62 | 82 | 24 | 67 | 18 | 51 | 15 | 71 | 8 | 35 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 82 | 75 | 71 | 5 | 65 | 5 | 51 | 4 | 11 | 0 | 0 | 44 | 21 | 2 | 6 | 2 | 2 | 1 | | | | | 5 | 50 | 1 | | | | | 5 | 1 |
| 5 | 21 | 62 | 27 | 50 | 51 | 10 | 71 | 10 | 65 | 6 | 24 | 0 | 0 | 34 | 15 | 2 | 2 | 1 | 21 | 1 | 13 | 1 | | | 3 | | | | | | | 1 | 1 |
| 6 | 6 | 62 | 26 | 19 | 65 | 18 | 16 | 13 | 76 | 6 | 44 | 120 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 20 | 62 | 23 | 42 | 26 | 20 | 82 | 14 | 27 | 7 | 17 | 40 | 0 | 11 | 2 | 1 | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 7 | 3 | 62 | 26 | 16 | 82 | 12 | 65 | 11 | 16 | 6 | 55 | 170 | 20 | 18 | 15 | 2 | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 7 | 18 | 62 | 26 | 32 | 92 | 14 | 32 | 6 | 65 | 6 | 42 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 8 | 62 | 23 | 44 | 26 | 25 | 82 | 11 | 16 | 1 | 19 | 0 | 0 | 7 | | | | | | | | | | | 0 | | | | | | | 3 | 0 |
| 8 | 22 | 62 | 23 | 80 | 26 | 8 | 70 | 5 | 82 | 4 | 3 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 5 | 62 | 26 | 33 | 82 | 26 | 23 | 26 | 27 | 4 | 11 | 0 | 0 | 75 | 17 | 3 | 2 | 2 | 7 | 1 | 22 | 1 | 15 | 1 | 0 | | | | | | | 0 | 0 |
| 9 | 19 | 62 | 82 | 47 | 26 | 16 | 27 | 14 | 23 | 12 | 11 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

NATIONAL WATER QUALITY NETWORK

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE OHIO
MAJOR BASIN OHIO RIVER
MINOR BASIN LITTLE MIAMI RIVER
STATION LOCATION LITTLE MIAMI RIVER AT
CINCINNATI, OHIO 90

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 3 | 61 | - | 3.9 | - | 1.7 | - | 1.7 | 3.5 | - | - | - | - | - | - | - | - | - | - |
| 10 | 10 | 61 | - | - | 7.4 | - | - | - | - | - | 24 | 264 | 324 | 5 | 0 | 40 | .0 | - | - |
| 10 | 17 | 61 | - | - | 8.1 | - | - | - | - | - | 24 | 174 | 230 | - | 0 | 39 | .2 | 245 | - |
| 10 | 24 | 61 | 10.2 | 6.1 | 7.4 | .9 | - | 2.3 | 5.2 | - | 24 | 204 | 256 | 10 | 0 | 45 | .8 | 303 | - |
| 10 | 31 | 61 | - | 4.3 | 7.7 | 1.8 | - | 3.3 | 6.5 | - | 26 | 260 | 320 | - | 0 | 56 | 1.6 | 354 | - |
| 11 | 7 | 61 | - | - | 7.7 | - | - | - | - | - | 27 | 272 | 324 | 5 | 0 | 62 | 1.1 | 400 | - |
| 11 | 14 | 61 | - | 7.5 | - | 1.3 | - | 2.2 | 5.0 | - | 29 | 170 | 208 | 10 | 120 | 43 | 2.5 | 306 | - |
| 11 | 21 | 61 | - | - | - | - | - | - | - | - | 24 | 232 | 280 | 10 | - | 50 | 1.6 | 332 | - |
| 11 | 28 | 61 | - | - | 7.7 | - | - | - | - | - | 17 | 98 | 252 | 10 | - | 40 | .3 | 307 | - |
| 12 | 5 | 61 | - | - | 7.7 | - | - | 3.8 | 7.1 | - | 17 | 200 | 252 | 5 | - | 40 | 1.1 | 299 | - |
| 12 | 12 | 61 | - | - | 7.6 | - | - | - | - | - | 15 | 74 | 200 | - | - | 35 | .4 | - | - |
| 12 | 19 | 61 | - | 10.5 | - | 2.0 | - | 4.8 | 9.9 | - | 12 | 112 | 128 | - | - | 38 | - | - | - |
| 12 | 26 | 61 | - | 11.3 | - | - | - | 3.0 | 5.6 | - | 15 | 160 | 224 | - | - | 45 | .2 | - | - |
| 1 | 2 | 62 | - | - | - | - | - | 1.1 | 5.0 | - | 16 | 228 | 296 | 5 | - | 63 | .5 | 358 | - |
| 1 | 9 | 62 | - | - | 7.2 | - | - | 3.3 | 7.5 | - | 17 | 136 | 212 | 20 | - | 45 | - | - | - |
| 1 | 16 | 62 | - | 12.2 | - | 4.8 | - | .8 | 8.4 | - | - | - | - | - | - | - | - | - | - |
| 1 | 23 | 62 | - | - | - | - | - | 4.6 | 11.1 | - | - | - | - | - | 350 | 42 | - | - | - |
| 1 | 25 | 62 | - | 6.4 | - | 2.7 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 30 | 62 | - | .6 | - | .7 | - | 2.5 | 4.8 | - | 12 | - | 228 | - | 5 | - | 5.4 | - | - |
| 2 | 6 | 62 | - | - | - | 1.0 | - | 1.8 | 3.1 | - | 15 | 188 | 244 | - | - | 50 | .0 | 320 | - |
| 2 | 13 | 62 | - | 12.4 | - | 1.8 | - | 1.0 | 2.1 | - | - | - | - | - | - | - | - | - | - |
| 2 | 27 | 62 | - | - | - | 10.2 | - | 2.6 | 7.3 | - | - | - | - | - | - | - | - | - | - |
| 4 | 4 | 62 | - | - | - | - | - | - | - | - | 9 | 140 | 212 | - | - | 40 | .4 | 244 | - |
| 4 | 23 | 62 | - | - | - | - | - | - | - | - | 18 | 220 | 352 | 5 | - | 50 | - | 375 | - |
| 5 | 1 | 62 | - | - | - | - | - | - | - | - | 20 | 364 | 488 | - | - | 55 | .0 | 476 | - |
| 5 | 7 | 62 | - | - | - | - | - | - | - | - | 16 | 232 | 280 | 5 | - | 40 | .4 | 340 | - |
| 5 | 14 | 62 | - | 11.0 | - | - | - | - | - | - | 14 | 244 | 288 | 5 | 25 | 55 | .6 | 371 | 60000 |
| 5 | 21 | 62 | - | - | - | - | - | - | - | - | 17 | 250 | 300 | 5 | 75 | 60 | .8 | 368 | 150000 |
| 5 | 28 | 62 | - | - | - | - | - | - | - | - | 14 | 120 | 168 | - | 400 | 30 | .5 | 185 | 18000 |
| 6 | 6 | 62 | - | 9.8 | 7.4 | - | - | - | - | - | 17 | 240 | 292 | 15 | 0 | 50 | .9 | 364 | 58000 |
| 6 | 13 | 62 | - | 9.9 | 7.2 | - | - | - | - | - | 17 | 240 | 280 | 15 | 0 | 40 | .5 | 345 | 46000 |
| 6 | 20 | 62 | - | 9.8 | 7.2 | - | - | - | - | - | 20 | 236 | 280 | 15 | 25 | 40 | .2 | 341 | - |
| 6 | 27 | 62 | - | 10.7 | 7.7 | - | - | - | - | - | 24 | 228 | 268 | 15 | 0 | 40 | - | 329 | 150000 |
| 7 | 3 | 62 | - | - | - | - | - | - | - | - | 30 | 220 | 260 | 25 | 80 | 50 | 1.0 | 373 | - |
| 7 | 11 | 62 | - | 10.0 | 7.6 | - | - | - | - | - | 20 | 156 | 196 | - | - | 39 | .0 | 252 | 12000 |
| 7 | 18 | 62 | - | 5.9 | 7.4 | - | 16 | - | - | .2 | 12 | 120 | 160 | 20 | 275 | 25 | .3 | 203 | 28000 |
| 7 | 25 | 62 | - | 7.8 | 8.0 | - | 18 | 2.6 | 6.1 | .2 | 17 | 176 | 220 | 10 | - | 35 | .6 | 259 | 9000 |
| 7 | 31 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 400 |
| 8 | 1 | 62 | 24.0 | 11.5 | 6.9 | - | 27 | 1.9 | - | .5 | 18 | 200 | 260 | - | 25 | 50 | .5 | 351 | - |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 8 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 9200 |
| 8 | 15 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *200 |
| 8 | 22 | 62 | 25.0 | 10.5 | 7.3 | - | 18 | 3.0 | 9.6 | .2 | 22 | 216 | 256 | 10 | 25 | 48 | .3 | 352 | 100 |
| 8 | 29 | 62 | 24.9 | 9.3 | 8.0 | - | 28 | 4.5 | 12.1 | .1 | 23 | 228 | 284 | 10 | 45 | 46 | .3 | 369 | 10000 |
| 9 | 5 | 62 | 23.1 | 7.7 | 7.8 | - | 26 | 2.8 | 7.1 | .2 | 24 | 220 | 300 | 5 | 25 | 45 | 1.0 | 382 | 4000 |
| 9 | 12 | 62 | 21.9 | 12.0 | 8.0 | 7.5 | 17 | 4.3 | 14.9 | .3 | 27 | 224 | 260 | 5 | 25 | 35 | 1.0 | 355 | 6800 |
| 9 | 19 | 62 | 19.2 | 9.6 | 7.9 | 4.4 | 22 | 2.8 | 9.2 | .4 | 26 | 252 | 296 | 5 | 25 | 45 | 1.2 | 370 | *200 |
| 9 | 26 | 62 | 17.2 | 10.5 | 8.2 | 2.8 | 18 | 2.4 | 7.1 | .4 | 25 | 220 | 256 | 5 | *25 | 40 | 1.2 | 345 | 3200 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Milford, Ohio
Operated by U.S. Geological Survey

STATE Ohio

MAJOR BASIN Ohio River

MINOR BASIN Little Miami River

STATION LOCATION Little Miami River at
Cincinnati, Ohio

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .142 | .164 | .360 | .600 | 1.060 | 6.240 | 2.870 | .838 | .595 | .130 | .197 | .121 |
| 2 | .160 | .153 | .340 | .600 | .958 | 3.160 | 2.410 | .784 | .495 | .134 | .173 | .177 |
| 3 | .156 | .150 | .320 | .622 | .888 | 2.330 | 1.700 | .575 | .461 | .162 | .169 | .209 |
| 4 | .142 | .172 | .315 | .634 | 1.010 | 1.940 | 1.270 | .495 | .461 | .217 | .162 | .245 |
| 5 | .139 | .153 | 1.750 | .700 | 1.670 | 1.840 | 1.110 | .448 | .452 | .448 | .151 | .189 |
| 6 | .136 | .172 | 1.490 | 3.690 | 1.680 | 1.590 | 1.060 | .430 | .495 | .290 | .148 | .181 |
| 7 | .128 | .153 | .972 | 3.810 | 1.000 | 1.420 | 1.010 | .430 | .412 | .245 | .151 | .158 |
| 8 | .128 | .142 | .718 | 2.210 | .808 | 1.610 | .965 | .443 | .366 | .221 | .158 | .140 |
| 9 | .122 | .132 | .592 | 1.350 | .874 | 4.270 | .965 | .412 | .371 | .294 | .144 | .134 |
| 10 | .233 | .128 | .878 | .743 | .788 | 5.460 | .937 | .398 | .312 | .281 | .130 | .140 |
| 11 | .495 | .128 | 1.410 | .616 | .646 | 3.790 | .804 | .398 | .308 | .221 | .130 | .137 |
| 12 | .495 | .128 | 1.000 | .658 | .640 | 5.410 | .754 | .394 | .299 | .193 | .127 | .130 |
| 13 | .495 | .128 | .854 | .743 | .670 | 4.280 | .754 | .380 | .299 | .217 | .115 | .130 |
| 14 | .490 | .142 | .628 | .736 | .867 | 3.020 | .772 | .366 | .290 | .299 | .112 | .124 |
| 15 | .473 | .156 | .528 | 3.000 | 1.040 | 2.340 | .718 | .348 | .281 | 1.240 | .112 | .284 |
| 16 | .468 | .216 | .534 | 3.970 | .993 | 1.930 | .650 | .340 | .254 | 1.410 | .103 | .290 |
| 17 | .290 | .407 | 3.720 | 1.950 | 1.210 | 1.620 | .620 | .326 | .241 | 1.430 | .103 | .229 |
| 18 | .153 | .446 | 2.570 | 1.250 | 1.130 | 1.400 | .595 | .317 | .229 | .846 | .103 | .185 |
| 19 | .132 | .335 | 2.190 | .993 | 2.120 | 1.290 | .575 | .312 | .221 | .515 | .100 | .154 |
| 20 | .122 | .262 | 1.980 | .867 | 1.720 | 1.300 | .555 | .299 | .201 | .389 | .100 | .148 |
| 21 | .122 | .240 | 1.510 | .808 | 1.350 | 8.200 | .530 | .326 | .193 | .335 | .096 | .130 |
| 22 | .128 | .240 | 1.170 | 10.000 | 2.120 | 6.930 | .510 | .666 | .181 | .620 | .090 | .121 |
| 23 | .122 | .678 | 1.280 | 5.860 | 4.070 | 3.380 | .500 | .407 | .181 | .620 | .090 | .118 |
| 24 | .119 | 2.170 | 1.720 | 2.690 | 13.300 | 2.450 | .490 | .326 | .181 | .475 | .090 | .112 |
| 25 | .116 | 1.240 | 1.140 | 1.920 | 5.160 | 1.930 | .470 | .281 | .177 | .380 | .090 | .112 |
| 26 | .107 | .821 | .888 | 1.990 | 15.700 | 1.590 | .452 | .322 | .165 | .366 | .090 | .106 |
| 27 | .122 | .640 | .874 | 4.280 | 21.600 | 1.340 | .448 | .773 | .140 | .308 | .090 | .115 |
| 28 | .119 | .528 | 1.200 | 3.130 | 16.700 | 1.130 | .443 | 1.040 | .154 | .276 | .148 | .118 |
| 29 | .110 | .446 | .881 | 1.980 |  | 1.030 | .434 | 1.220 | .144 | .250 | .124 | .112 |
| 30 | .104 | .396 | .712 | 1.540 |  | .965 | .430 | .916 | .130 | .225 | .103 | .106 |
| 31 | .110 |  | .628 | 1.210 |  | 2.030 |  | .706 |  | .209 | .103 |  |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 24 | 61 | 11 | 3 | – | – | – | – | – | – | 6 | 5 | 17 | 6 | 23 | 8 | | | | | | |
| 12 | 1 | 61 | 12 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 22 | 5 | 29 | 5 | 51 | 7 | | | | | | |
| 12 | 14 | 61 | 12 | 26 | 0 | 0 | 0 | 1 | 0 | 1 | 16 | 5 | 19 | 6 | 35 | 8 | | | | | | |

STATION LOCATION MERRIMACK RIVER ABOVE

LOWELL, MASSACHUSETTS

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 24 | 61 | 1400 | 0 | 0 | 350 | 0 | 190 | 0 | 620 | 250 | 20 | 150 | 68 | 2 | 69 | 2 | 51 | 1 | | | | | | | | | | | | | | |
| 12 | 1 | 61 | 300 | 0 | 0 | 20 | 0 | 100 | 0 | 20 | 100 | 0 | 100 | | | | | | | | | | | | | | | | | | | | |
| 12 | 14 | 61 | 400 | 20 | 0 | 90 | 0 | 50 | 20 | 0 | 180 | 20 | 140 | | | | | | | | | | | | | | | | | | | | |
| 6 | 28 | 62 | 29500 | 3520 | 80 | 11140 | 80 | 9190 | 1010 | 2650 | 1820 | 620 | 580 | 51 | 6 | 3 | 5 | 24 | 4 | 68 | 4 | 40 | 4 | 31 | 4 | 38 | 3 | 25 | 3 | 36 | 2 | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 24 | 61 | 58 | 41 | 56 | 19 | 9 | 2 | 92 | 2 | 36 | 170 | 0 | 110 | 11 | 4 | 17 | 3 | 2 | 1 | | | | | 2 | | | | | | | 0 | 0 |
| 12 | 1 | 61 | 92 | 15 | 93 | 6 | 56 | 6 | 58 | 5 | 68 | 20 | 0 | 8 | | | | | | | | | | | 1 | | | | | | | 2 | 0 |
| 12 | 14 | 61 | | | | | | | | | | 50 | 0 | 6 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 6 | 28 | 62 | 47 | 54 | 28 | 9 | 92 | 7 | 56 | 7 | 23 | 0 | 0 | 1370 | 11 | 7 | 17 | 7 | 2 | 6 | 46 | 4 | 22 | 4 | 110 | 76 | 5 | 51 | 4 | 50 | 3 | 0 | 0 |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 8 | 20 | 61 | 12 | 15 | 5000 | 314 | 109 | 205 | 3 | 25 | 41 | 7 | 5 | 26 | 3 | 14 | 8 | 3 | 1 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 25 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 14000 |
| 12 | 13 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 8000 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station below Concord River at Lowell, Massachusetts
Operated by U.S. Geological Survey

| | |
|---|---|
| STATE | Massachusetts |
| MAJOR BASIN | Northeast |
| MINOR BASIN | Merrimack River |
| STATION LOCATION | Merrimack River above Lowell, Massachusetts |

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.040 | 1.890 | 4.790 | 3.300 | 4.600 | 3.920 | 34.900 | 14.900 | 5.290 | 1.580 | 1.970 | 1.460 |
| 2 | 3.090 | 2.010 | 4.110 | 3.550 | 4.200 | 4.200 | 49.500 | 16.500 | 5.090 | 1.600 | 1.800 | 1.110 |
| 3 | 2.830 | 1.840 | 3.580 | 3.760 | 3.700 | 3.600 | 48.900 | 15.800 | 4.430 | 1.480 | 1.850 | 1.260 |
| 4 | 2.880 | 1.380 | 3.950 | 3.640 | 2.830 | 3.090 | 39.600 | 15.400 | 4.490 | 1.230 | 1.310 | 1.770 |
| 5 | 2.660 | .993 | 3.920 | 3.670 | 3.670 | 3.550 | 30.200 | 15.900 | 4.170 | 1.560 | .371 | 1.830 |
| 6 | 3.050 | 1.810 | 4.240 | 3.330 | 4.010 | 3.860 | 26.000 | 14.400 | 4.170 | 1.560 | 1.930 | 1.810 |
| 7 | 2.800 | 2.110 | 5.160 | 3.610 | 4.170 | 4.050 | 25.600 | 13.700 | 5.740 | 1.320 | 1.930 | 1.890 |
| 8 | 2.340 | 3.130 | 5.530 | 4.920 | 4.170 | 4.210 | 29.700 | 12.900 | 6.230 | .993 | 1.710 | 1.560 |
| 9 | 2.660 | 4.950 | 4.850 | 6.740 | 4.010 | 4.240 | 36.700 | 12.200 | 5.190 | 1.440 | 1.780 | .548 |
| 10 | 2.470 | 4.720 | 3.800 | 6.620 | 3.580 | 4.050 | 38.600 | 10.600 | 3.830 | 1.460 | 2.390 | 1.520 |
| 11 | 2.390 | 3.480 | 4.400 | 6.340 | 2.970 | 3.520 | 35.000 | 8.750 | 4.240 | 1.600 | 2.510 | 1.600 |
| 12 | 2.110 | 2.600 | 3.890 | 5.940 | 3.210 | 4.300 | 30.000 | 7.700 | 4.370 | 1.620 | 2.600 | 1.520 |
| 13 | 2.310 | 3.590 | 3.670 | 4.950 | 3.300 | 5.800 | 25.900 | 6.890 | 3.890 | 1.560 | 2.630 | 1.510 |
| 14 | 2.160 | 3.550 | 3.890 | 4.050 | 3.240 | 6.440 | 24.000 | 7.380 | 3.730 | 1.420 | 2.720 | 1.530 |
| 15 | 1.520 | 3.500 | 4.010 | 4.170 | 3.270 | 7.120 | 22.600 | 6.740 | 3.640 | 1.090 | 2.730 | 1.180 |
| 16 | 2.700 | 3.370 | 3.100 | 5.260 | 3.180 | 7.310 | 20.600 | 6.300 | 2.940 | 1.790 | 2.410 | .848 |
| 17 | 2.870 | 3.320 | 2.770 | 6.500 | 2.600 | 7.580 | 18.000 | 6.440 | 2.080 | 1.690 | 2.520 | 1.570 |
| 18 | 2.950 | 2.800 | 3.450 | 6.600 | 2.110 | 7.380 | 16.000 | 6.740 | 2.690 | 1.780 | 1.900 | 1.770 |
| 19 | 3.080 | 3.090 | 3.240 | 6.520 | 2.740 | 8.700 | 14.000 | 6.550 | 2.310 | 1.690 | 1.160 | 1.840 |
| 20 | 2.970 | 3.460 | 3.300 | 5.740 | 2.880 | 9.540 | 12.600 | 6.660 | 2.150 | 1.620 | 2.110 | 2.110 |
| 21 | 2.180 | 3.610 | 3.420 | 4.820 | 2.970 | 9.080 | 11.700 | 7.380 | 1.840 | 1.260 | 2.120 | 2.060 |
| 22 | 1.500 | 3.890 | 3.360 | 5.230 | 2.740 | 9.040 | 10.300 | 7.150 | 1.840 | 1.160 | 2.100 | 1.550 |
| 23 | 2.500 | 3.000 | 3.270 | 5.600 | 3.800 | 8.830 | 11.200 | 7.340 | 1.580 | 1.870 | 1.960 | .937 |
| 24 | 2.390 | 4.110 | 2.770 | 5.630 | 3.550 | 9.210 | 12.400 | 6.740 | 1.190 | 2.350 | 1.800 | 1.690 |
| 25 | 2.570 | 5.630 | 2.660 | 5.700 | 3.360 | 9.920 | 13.800 | 6.930 | 2.120 | 2.800 | 1.610 | 1.750 |
| 26 | 2.570 | 7.270 | 3.060 | 5.460 | 3.390 | 12.000 | 11.700 | 10.600 | 2.270 | 2.520 | 1.130 | 1.530 |
| 27 | 2.500 | 6.770 | 2.940 | 5.290 | 3.580 | 13.600 | 9.960 | 10.500 | 2.640 | 2.280 | 1.740 | 1.620 |
| 28 | 1.870 | 6.440 | 3.060 | 4.590 | 3.670 | 16.200 | 8.870 | 9.120 | 2.440 | 1.520 | 1.700 | 2.310 |
| 29 | 1.280 | 5.770 | 3.200 | 5.260 | | 16.800 | 10.000 | 7.500 | 2.160 | .797 | 1.790 | 2.060 |
| 30 | 1.880 | 5.430 | 3.600 | 5.020 | | 20.000 | 13.100 | 5.500 | 1.640 | 2.230 | 1.630 | 1.390 |
| 31 | 1.910 | | 3.200 | 4.800 | | 26.000 | | 5.670 | | 2.180 | 1.660 | |

RESULTS IN MICROGRAMS PER LITER
*(Parts per billion)*

**STATION LOCATION** MISSISSIPPI RIVER AT
NEW ORLEANS, LOUISIANA

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 25 | 61 | 11 | 1 | 6434 | 131 | 51 | 80 | 2 | 12 | 14 | 1 | 1 | 11 | 1 | 5 | 5 | 1 | 12 |
| 11 | 13 | 61 | 11 | 20 | 6440 | 116 | 29 | 87 | 1 | 7 | 11 | 1 | 1 | 8 | 1 | 3 | 1 | 1 | 5 |
| 12 | 11 | 61 | 12 | 18 | 6440 | 121 | 35 | 86 | 0 | 10 | 11 | 1 | 2 | 7 | 1 | 4 | 2 | 1 | 7 |
| 2 | 8 | 62 | 2 | 15 | 6325 | 100 | 48 | 52 | 2 | 11 | 12 | 1 | 1 | 10 | 0 | 5 | 4 | 1 | 13 |
| 3 | 7 | 62 | 3 | 14 | 6440 | 71 | 25 | 46 | 1 | 6 | 8 | 1 | 1 | 6 | 0 | 3 | 3 | 0 | 4 |
| 3 | 30 | 62 | 4 | 6 | 6440 | 96 | 26 | 70 | 0 | 6 | 10 | 1 | 1 | 8 | 0 | 3 | 2 | 0 | 5 |
| 4 | 24 | 62 | 5 | 1 | 6440 | 119 | 54 | 65 | 2 | 18 | 11 | 1 | 1 | 9 | 0 | 5 | 5 | 1 | 12 |
| 5 | 21 | 62 | 5 | 28 | 6440 | 95 | 55 | 40 | 4 | 13 | 14 | 1 | 1 | 11 | 1 | 7 | 5 | 1 | 11 |
| 6 | 20 | 62 | 6 | 27 | 6440 | 78 | 33 | 45 | 1 | 8 | 11 | 1 | 1 | 9 | 0 | 4 | 3 | 1 | 5 |
| 7 | 17 | 62 | 7 | 24 | 6440 | 78 | 32 | 46 | 0 | 7 | 11 | 1 | 1 | 8 | 1 | 3 | 2 | 1 | 8 |
| 8 | 20 | 62 | 8 | 27 | 6440 | 78 | 30 | 48 | 0 | 7 | 11 | 1 | 1 | 8 | 1 | 4 | 2 | 1 | 5 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** LOUISIANA
**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER
**MINOR BASIN** LOWER MISSISSIPPI-NATCHEZ TO GULF
**STATION LOCATION** MISSISSIPPI RIVER AT
NEW ORLEANS, LOUISIANA 20

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 20 | 61 | 10 | 31 | 0 | 2 | 1 | 1 | 1 | 2 | 17 | 7 | 12 | 6 | 29 | 9 | | | | | | |
| 10 | 26 | 61 | 11 | 3 | - | - | - | - | - | - | 9 | 7 | 15 | 8 | 24 | 11 | | | | | | |
| 11 | 2 | 61 | 11 | 16 | - | - | - | - | - | - | 0 | 13 | 18 | 13 | 18 | 18 | | | | | | |
| 11 | 9 | 61 | 11 | 21 | - | - | - | - | - | - | 5 | 7 | 11 | 7 | 16 | 10 | | | | | | |
| 11 | 16 | 61 | 11 | 28 | - | - | - | - | - | - | 22 | 8 | 37 | 9 | 59 | 12 | | | | | | |
| 11 | 22 | 61 | 11 | 30 | 1 | 1 | 1 | 1 | 2 | 1 | 13 | 5 | 23 | 6 | 36 | 8 | | | | | | |
| 11 | 30 | 61 | 12 | 7 | - | - | - | - | - | - | 43 | 9 | 16 | 6 | 59 | 11 | | | | | | |
| 12 | 7 | 61 | 12 | 14 | - | - | - | - | - | - | 64 | 10 | 29 | 8 | 93 | 13 | | | | | | |
| 12 | 14 | 61 | 12 | 22 | - | - | - | - | - | - | 26 | 8 | 28 | 8 | 54 | 11 | | | | | | |
| 12 | 21 | 61 | 1 | 8 | 20 | 9 | 1 | 1 | 21 | 9 | 87 | 11 | 58 | 7 | 145 | 13 | | | | | | |
| 12 | 28 | 61 | 1 | 5 | - | - | - | - | - | - | 46 | 10 | 20 | 7 | 66 | 12 | | | | | | |
| 1 | 11 | 62 | 1 | 19 | - | - | - | - | - | - | 11 | 6 | 23 | 7 | 34 | 9 | | | | | | |
| 1 | 18 | 62 | 1 | 29 | 4 | 3 | 1 | 1 | 5 | 3 | 38 | 8 | 28 | 6 | 66 | 10 | | | | | | |
| 1 | 25 | 62 | 2 | 6 | - | - | - | - | - | - | 38 | 8 | 22 | 7 | 60 | 11 | | | | | | |
| 2 | 1 | 62 | 2 | 13 | - | - | - | - | - | - | 116 | 19 | 34 | 7 | 150 | 20 | | | | | | |
| 2 | 8 | 62 | 2 | 19 | - | - | - | - | - | - | 41 | 10 | 23 | 7 | 64 | 12 | | | | | | |
| 2 | 15 | 62 | 2 | 28 | - | - | - | - | - | - | 42 | 10 | 32 | 7 | 74 | 12 | | | | | | |
| 2 | 22 | 62 | 3 | 8 | 8 | 5 | 0 | 1 | 8 | 5 | 90 | 14 | 31 | 6 | 121 | 15 | | | | | | |
| 3 | 1 | 62 | 3 | 13 | - | - | - | - | - | - | 46 | 10 | 17 | 7 | 63 | 12 | | | | | | |
| 3 | 8 | 62 | 3 | 20 | - | - | - | - | - | - | 98 | 12 | 19 | 7 | 117 | 14 | | | | | | |
| 3 | 15 | 62 | 3 | 29 | - | - | - | - | - | - | 105 | 21 | 30 | 7 | 135 | 22 | | | | | | |
| 3 | 20 | 62 | 4 | 3 | 3 | 2 | 1 | 1 | 4 | 2 | 56 | 7 | 22 | 5 | 78 | 9 | | | | | | |
| 3 | 29 | 62 | 4 | 12 | - | - | - | - | - | - | 80 | 12 | 30 | 7 | 110 | 14 | | | | | | |
| 4 | 5 | 62 | 4 | 20 | - | - | - | - | - | - | 98 | 21 | 19 | 8 | 117 | 22 | | | | | | |
| 4 | 12 | 62 | 4 | 26 | - | - | - | - | - | - | 85 | 19 | 33 | 7 | 118 | 20 | | | | | | |
| 4 | 19 | 62 | 5 | 2 | 4 | 2 | 1 | 2 | 5 | 3 | 50 | 7 | 27 | 6 | 77 | 9 | | | | | | |
| 4 | 26 | 62 | 5 | 25 | - | - | - | - | - | - | 118 | 13 | 55 | 9 | 173 | 16 | | | | | | |
| 5 | 3 | 62 | 6 | 21 | - | - | - | - | - | - | 118 | 14 | 39 | 8 | 157 | 16 | | | | | | |
| 5 | 10 | 62 | 6 | 20 | - | - | - | - | - | - | 18 | 9 | 21 | 9 | 39 | 13 | | | | | | |
| 5 | 17 | 62 | 6 | 22 | - | - | - | - | - | - | 13 | 4 | 29 | 5 | 42 | 6 | | | | | | |
| 5 | 24 | 62 | 6 | 27 | 2 | 1 | 1 | 1 | 3 | 1 | 15 | 8 | 22 | 8 | 37 | 11 | | | | | | |
| 5 | 31 | 62 | 7 | 2 | - | - | - | - | - | - | 28 | 9 | 26 | 8 | 54 | 12 | | | | | | |
| 6 | 7 | 62 | 7 | 6 | - | - | - | - | - | - | 16 | 6 | 24 | 7 | 40 | 9 | | | | | | |
| 6 | 14 | 62 | 7 | 12 | - | - | - | - | - | - | 33 | 18 | 27 | 9 | 60 | 20 | | | | | | |
| 6 | 21 | 62 | 8 | 6 | 3 | 5 | 2 | 2 | 5 | 5 | 49 | 61 | 17 | 16 | 66 | 63 | | | | | | |
| 6 | 28 | 62 | 7 | 24 | - | - | - | - | - | - | 53 | 12 | 37 | 8 | 90 | 14 | | | | | | |
| 7 | 5 | 62 | 9 | 30 | - | - | - | - | - | - | 173 | 63 | 2 | 7 | 175 | 63 | | | | | | |
| 7 | 26 | 62 | 8 | 21 | 0 | 1 | 1 | 2 | 1 | 2 | 11 | 10 | 25 | 12 | 36 | 16 | | | | | | |
| 8 | 2 | 62 | 8 | 23 | - | - | - | - | - | - | 11 | 7 | 22 | 8 | 33 | 11 | | | | | | |
| 8 | 9 | 62 | 8 | 27 | - | - | - | - | - | - | 92 | 15 | 19 | 3 | 111 | 15 | | | | | | |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** LOWER MISSISSIPPI-NATCHEZ TO GULF

**STATION LOCATION** MISSISSIPPI RIVER AT
NEW ORLEANS, LOUISIANA 20

| DATE SAMPLE TAKEN | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 16 | 62 | 9 | 5 | – | – | – | – | – | – | 7 | 6 | 20 | 7 | 27 | 9 | | | | | | |
| 23 | 62 | 9 | 9 | 0 | 1 | 1 | 2 | 1 | 2 | 5 | 4 | 25 | 6 | 30 | 7 | | | | | | |
| 28 | 62 | 10 | 25 | – | – | – | – | – | – | 3 | 12 | 17 | 15 | 20 | 19 | | | | | | |
| 6 | 62 | 10 | 1 | – | – | – | – | – | – | 6 | 13 | 4 | 16 | 10 | 21 | | | | | | |
| 20 | 62 | 10 | 16 | 1 | 1 | 2 | 2 | 3 | 2 | 0 | 5 | 22 | 8 | 22 | 9 | | | | | | |
| 27 | 62 | 10 | 22 | – | – | – | – | – | – | 7 | 3 | 22 | 4 | 29 | 5 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** LOUISIANA

**MAJOR BASIN** SOUTHWEST—LOWER MISSISSIPPI RIV

**MINOR BASIN** LOWER MISSISSIPPI-NATCHEZ TO GU

**STATION LOCATION** MISSISSIPPI RIVER AT
NEW ORLEANS, LOUISIANA

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Coo* | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 4 | 61 | 300 | 0 | 0 | 20 | 0 | 20 | 0 | 250 | 0 | 110 | 70 | 69 | 1 | | | | | | | | | | | | | | | | |
| 10 | 18 | 61 | 100 | 20 | 50 | 0 | 0 | 0 | 0 | 50 | 20 | 200 | 70 | | | | | | | | | | | | | | | | | | |
| 11 | 1 | 61 | 400 | 20 | 0 | 20 | 0 | 0 | 0 | 210 | 150 | 0 | 20 | | | | | | | | | | | | | | | | | | |
| 11 | 15 | 61 | 1000 | 0 | 60 | 80 | 0 | 80 | 0 | 620 | 170 | 60 | 80 | 71 | 2 | 69 | 1 | | | | | | | | | | | | | | |
| 12 | 20 | 61 | 800 | 0 | 0 | 20 | 0 | 60 | 0 | 580 | 170 | 60 | 40 | 71 | 2 | 69 | 2 | | | | | | | | | | | | | | |
| 1 | 3 | 62 | 600 | 0 | 0 | 20 | 0 | 60 | 0 | 450 | 50 | 290 | 290 | 71 | 1 | | | | | | | | | | | | | | | | |
| 1 | 17 | 62 | 900 | 0 | 0 | 20 | 0 | 20 | 0 | 700 | 120 | 100 | 80 | 71 | 1 | | | | | | | | | | | | | | | | |
| 1 | 31 | 62 | 700 | 0 | 0 | 40 | 0 | 80 | 0 | 410 | 170 | 40 | 120 | 71 | 1 | | | | | | | | | | | | | | | | |
| 2 | 14 | 62 | 400 | 0 | 0 | 40 | 0 | 20 | 70 | 180 | 70 | 130 | 250 | | | | | | | | | | | | | | | | | | |
| 3 | 15 | 62 | 500 | 0 | 0 | 0 | 0 | 0 | 20 | 210 | 310 | 190 | 150 | 92 | 1 | | | | | | | | | | | | | | | | |
| 4 | 4 | 62 | 500 | 0 | 0 | 0 | 0 | 170 | 20 | 190 | 150 | 40 | 120 | | | | | | | | | | | | | | | | | | |
| 4 | 18 | 62 | 900 | 0 | 0 | 40 | 0 | 40 | 0 | 530 | 250 | 250 | 210 | 69 | 2 | 71 | 1 | | | | | | | | | | | | | | |
| 5 | 2 | 62 | 1200 | 0 | 80 | 80 | 0 | 130 | 80 | 760 | 110 | 700 | 130 | 71 | 2 | 69 | 1 | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 1000 | 0 | 60 | 80 | 60 | 20 | 20 | 700 | 80 | 1630 | 270 | 71 | 2 | | | | | | | | | | | | | | | | |
| 5 | 20 | 62 | 2300 | 0 | 0 | 230 | 340 | 130 | 0 | 1310 | 340 | 1560 | 380 | 71 | 3 | 50 | 2 | 69 | 1 | 92 | 1 | | | | | | | | | | |
| 6 | 4 | 62 | 1300 | 20 | 40 | 170 | 20 | 20 | 0 | 680 | 310 | 310 | 0 | 69 | 1 | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 2200 | 0 | 0 | 60 | 0 | 870 | 0 | 810 | 410 | 210 | 60 | 57 | 3 | 71 | 3 | 92 | 1 | | | | | | | | | | | | |
| 7 | 2 | 62 | 900 | 0 | 0 | 20 | 40 | 20 | 20 | 270 | 370 | 150 | 150 | 92 | 1 | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 1100 | 40 | 0 | 150 | 20 | 80 | 0 | 750 | 250 | 0 | 80 | 68 | 2 | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 1100 | 0 | 0 | 80 | 100 | 0 | 0 | 700 | 210 | 40 | 0 | 71 | 2 | 69 | 1 | 68 | 1 | | | | | | | | | | | | |
| 8 | 20 | 62 | 500 | 0 | 40 | 60 | 0 | 60 | 0 | 80 | 250 | 120 | 120 | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 900 | 0 | 40 | 100 | 20 | 40 | 0 | 620 | 40 | 120 | 0 | 67 | 2 | 69 | 1 | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 700 | 0 | 0 | 40 | 0 | 40 | 0 | 560 | 80 | 80 | 0 | 69 | 1 | 67 | 1 | | | | | | | | | | | | | | |

**STATION LOCATION** MISSISSIPPI RIVER AT
NEW ORLEANS, LOUISIANA 020

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| | | | | | | | | | | | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 4 | 61 | 58 | 37 | 56 | 35 | 26 | 5 | 83 | 4 | 19 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 18 | 61 | 56 | 21 | 92 | 20 | 58 | 17 | 26 | 13 | 29 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 1 | 61 | 56 | 40 | 58 | 22 | 92 | 16 | 83 | 9 | 13 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 15 | 61 | 92 | 23 | 83 | 20 | 56 | 16 | 58 | 12 | 29 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 20 | 61 | 56 | 29 | 83 | 29 | 92 | 17 | 47 | 4 | 21 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 3 | 62 | 56 | 34 | 92 | 25 | 80 | 19 | 26 | 4 | 18 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 17 | 62 | 80 | 25 | 56 | 20 | 92 | 12 | 83 | 8 | 55 | 20 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 1 | 31 | 62 | 56 | 19 | 92 | 12 | 89 | 12 | 62 | 6 | 51 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 14 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 15 | 62 | 80 | 17 | 92 | 14 | 62 | 7 | 56 | 6 | 56 | 60 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 4 | 62 | 62 | 30 | 92 | 30 | 83 | 8 | 71 | 6 | 26 | 40 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 18 | 62 | 62 | 21 | 92 | 13 | 83 | 9 | 26 | 5 | 52 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 2 | 62 | 62 | 36 | 92 | 21 | 56 | 10 | 80 | 7 | 26 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 80 | 26 | 56 | 17 | 92 | 13 | 82 | 12 | 32 | 0 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 20 | 62 | 80 | 28 | 56 | 17 | 92 | 14 | 58 | 12 | 29 | 80 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 56 | 27 | 80 | 26 | 58 | 15 | 92 | 4 | 28 | 20 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 92 | 26 | 80 | 13 | 83 | 13 | 71 | 10 | 38 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 92 | 28 | 80 | 15 | 71 | 11 | 56 | 7 | 39 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 26 | 56 | 56 | 12 | 58 | 10 | 20 | 5 | 17 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 20 | 27 | 58 | 17 | 56 | 16 | 26 | 13 | 27 | 0 | 0 | 6 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 58 | 29 | 20 | 16 | 56 | 15 | 26 | 12 | 28 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 20 | 48 | 58 | 20 | 56 | 18 | 57 | 5 | 9 | 0 | 0 | 17 | 17 | 1 | 11 | 1 | | | | | | | 0 | | | | | | | 3 | 0 |
| 9 | 17 | 62 | 20 | 37 | 58 | 25 | 56 | 22 | 89 | 4 | 12 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

| | |
|---|---|
| **STATE** | LOUISIANA |
| **MAJOR BASIN** | SOUTHWEST-LOWER MISSISSIPPI RIVER |
| **MINOR BASIN** | LOWER MISSISSIPPI-NATCHEZ TO GULF |
| **STATION LOCATION** | MISSISSIPPI RIVER AT<br>NEW ORLEANS, LOUISIANA 20 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 5 | 61 | 23.3 | 5.6 | 7.9 | - | 26 | 2.0 | 5.4 | 1.0 | 16 | 96 | 115 | 25 | 228 | 40 | .2 | 194 | 830 |
| 10 | 12 | 61 | 21.7 | 7.2 | 8.0 | .4 | 23 | 1.5 | 5.4 | .5 | 22 | 104 | 137 | 20 | 210 | 44 | .2 | 223 | - |
| 10 | 19 | 61 | 21.1 | 7.2 | 8.0 | .3 | 17 | 1.2 | 4.4 | .7 | 23 | 101 | 128 | 15 | 170 | 42 | .2 | 210 | 2400 |
| 10 | 26 | 61 | 20.0 | 7.2 | 8.2 | .7 | 19 | .7 | 4.4 | .7 | 23 | 124 | 161 | 10 | 198 | 45 | .2 | 196 | 2200 |
| 11 | 2 | 61 | 18.9 | 7.5 | 8.0 | - | 19 | 1.2 | 4.4 | .8 | 26 | 136 | 183 | 20 | 153 | 65 | .1 | 273 | 1100 |
| 11 | 9 | 61 | 16.1 | 8.5 | 8.0 | .9 | 21 | 1.3 | 4.4 | .8 | 24 | 130 | 167 | 20 | 145 | 51 | .1 | 290 | - |
| 11 | 16 | 61 | 15.6 | 8.5 | 7.9 | .8 | 24 | 1.3 | 4.4 | .7 | 38 | 135 | 180 | 15 | 218 | 55 | .2 | 285 | 1200 |
| 11 | 22 | 61 | 13.9 | 7.8 | 7.8 | 1.2 | 30 | 1.7 | 5.4 | .8 | 21 | 109 | 141 | 25 | 318 | 41 | .1 | 241 | 200 |
| 11 | 30 | 61 | 12.2 | 8.7 | 7.6 | .7 | 23 | 1.6 | 5.2 | .8 | 32 | 111 | 157 | 20 | 185 | 49 | .2 | 287 | 2000 |
| 12 | 7 | 61 | 10.0 | 7.0 | 7.8 | - | 30 | 1.6 | 6.2 | .8 | 22 | 92 | 130 | 30 | 395 | 37 | .1 | 211 | 1800 |
| 12 | 14 | 61 | 11.1 | 9.7 | 7.7 | 1.4 | 22 | 1.6 | 5.2 | .6 | 27 | 99 | 141 | 30 | 158 | 41 | .2 | 237 | 20000 |
| 12 | 21 | 61 | 10.0 | 9.9 | 7.6 | 1.6 | 28 | 1.4 | 5.2 | .8 | 24 | 89 | 126 | 35 | 370 | 48 | .2 | 209 | 2600 |
| 12 | 28 | 61 | 5.6 | 10.1 | 7.4 | 1.3 | 23 | .6 | 4.3 | .8 | 21 | 76 | 104 | 35 | 185 | 33 | .2 | 176 | 600 |
| 1 | 4 | 62 | 7.2 | 11.0 | 7.7 | 1.9 | 18 | 1.2 | 5.0 | 1.0 | 21 | 77 | 109 | 30 | 178 | 32 | .2 | 193 | 1400 |
| 1 | 11 | 62 | 6.1 | 11.4 | 7.7 | 1.7 | 27 | 1.2 | 5.8 | .9 | 17 | 80 | 111 | 20 | 158 | 35 | .1 | 160 | 500 |
| 1 | 18 | 62 | 4.4 | 11.5 | 7.5 | 2.1 | 23 | 1.2 | 6.0 | .9 | 24 | 93 | 122 | 30 | 163 | 39 | .1 | 216 | 5300 |
| 1 | 25 | 62 | 4.4 | 12.6 | 7.8 | 2.9 | 22 | 1.2 | 5.2 | .9 | 21 | 87 | 115 | 30 | 170 | 38 | .1 | 212 | 6000 |
| 2 | 1 | 62 | 4.4 | 11.2 | 7.4 | 1.8 | 23 | 1.2 | 6.2 | .7 | 17 | 70 | 98 | 35 | 198 | 36 | .1 | 175 | 1000 |
| 2 | 8 | 62 | 5.6 | 10.9 | 7.5 | 3.2 | 25 | 1.3 | 4.7 | .9 | 16 | 76 | 100 | 35 | 288 | 33 | .1 | 181 | 1300 |
| 2 | 15 | 62 | 7.2 | 8.7 | 7.7 | 1.4 | 16 | 1.3 | 4.7 | .8 | 19 | 80 | 111 | 20 | 178 | 37 | .1 | 201 | - |
| 2 | 22 | 62 | 8.3 | 9.4 | 7.5 | 1.4 | 23 | 1.3 | 5.3 | .8 | 18 | 81 | 120 | 20 | 185 | 30 | .1 | 191 | 800 |
| 3 | 1 | 62 | 10.0 | 8.2 | 7.8 | 1.1 | 20 | 1.3 | 4.7 | .8 | 20 | 92 | 126 | 25 | 163 | 45 | - | 200 | 200 |
| 3 | 9 | 62 | 7.8 | 8.1 | 7.8 | .8 | 22 | 1.1 | 5.5 | 1.2 | 17 | 79 | 107 | 25 | 230 | 37 | .1 | 222 | - |
| 3 | 15 | 62 | 7.8 | 8.9 | 7.7 | 2.5 | 25 | 1.3 | 5.5 | .7 | 13 | 69 | 96 | 30 | 315 | 37 | .1 | 140 | 12 |
| 3 | 22 | 62 | 8.9 | 7.9 | 7.5 | .7 | 17 | 1.3 | 5.3 | .9 | 12 | 67 | 96 | 25 | 198 | 37 | .1 | 144 | 600 |
| 3 | 29 | 62 | 10.0 | 8.3 | 7.5 | .5 | 17 | 1.4 | 5.2 | 1.0 | 14 | 77 | 109 | 15 | 145 | 34 | .1 | 169 | 200 |
| 4 | 5 | 62 | 11.1 | 8.0 | 7.6 | 2.9 | 18 | 1.1 | 5.5 | .3 | 17 | 80 | 113 | 15 | 253 | 39 | .1 | - | 2700 |
| 4 | 12 | 62 | 11.7 | 7.0 | 7.2 | .1 | 23 | 1.2 | 4.8 | .4 | 15 | - | 115 | 20 | 460 | 39 | .1 | 199 | *200 |
| 4 | 19 | 62 | 13.3 | 7.0 | 7.6 | .6 | 25 | 1.2 | 4.0 | .4 | 14 | 87 | 115 | 15 | 198 | 37 | .1 | 171 | - |
| 4 | 26 | 62 | 14.4 | 7.5 | 7.6 | 2.0 | 16 | 1.0 | 4.0 | .2 | 14 | 84 | 120 | 20 | 158 | 37 | .1 | 217 | - |
| 5 | 3 | 62 | 16.7 | 7.0 | 7.7 | 1.5 | 19 | 1.5 | 4.0 | .3 | 14 | 83 | 115 | 30 | 190 | 32 | .1 | 185 | 1200 |
| 5 | 10 | 62 | 18.9 | 5.7 | 7.7 | 1.6 | 19 | 1.5 | 4.5 | .3 | 15 | 91 | 120 | 35 | 178 | 34 | .2 | 210 | - |
| 5 | 17 | 62 | 22.2 | 6.5 | 7.5 | 2.2 | 19 | 1.2 | 5.4 | .3 | 17 | 100 | 135 | 30 | 103 | 41 | .1 | 204 | 5800 |
| 5 | 24 | 62 | 24.4 | 2.6 | 7.6 | 1.2 | 14 | 1.2 | 4.0 | .1 | 18 | 111 | 148 | 20 | 78 | 48 | .1 | - | 200 |
| 5 | 31 | 62 | 25.0 | 5.8 | 7.9 | .3 | 18 | .6 | 4.5 | .3 | 20 | 121 | 161 | 20 | 128 | 53 | .1 | 285 | - |
| 6 | 7 | 62 | 25.7 | 5.5 | 7.9 | 1.3 | 13 | .9 | 4.2 | .4 | 21 | 132 | 176 | 30 | 85 | 55 | .1 | 284 | 400 |
| 6 | 14 | 62 | 24.4 | 4.7 | 7.8 | 1.2 | 16 | 1.3 | 4.6 | .5 | 23 | 132 | 183 | 15 | 145 | 68 | .1 | 342 | - |
| 6 | 21 | 62 | 26.1 | 4.7 | 7.8 | .2 | 34 | 1.3 | 4.6 | .5 | 24 | 113 | 152 | 15 | 475 | 48 | .2 | 272 | 2000 |
| 6 | 28 | 62 | 26.1 | 5.3 | 7.7 | .2 | 23 | 1.3 | 5.4 | .4 | 27 | 113 | 150 | 30 | 370 | 52 | .2 | 252 | 3000 |

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** LOUISIANA

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** LOWER MISSISSIPPI-NATCHEZ TO GULF

**STATION LOCATION** MISSISSIPPI RIVER AT
NEW ORLEANS, LOUISIANA 20

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 5 | 62 | 26.7 | 6.1 | 7.8 | 2.2 | 24 | 1.4 | 5.3 | .4 | 20 | 119 | 154 | 20 | 325 | 45 | .1 | 311 | 7000 |
| 7 | 12 | 62 | 27.8 | 5.3 | 7.6 | .8 | 15 | 1.4 | 5.1 | .4 | 27 | 123 | 159 | 15 | 115 | 45 | .1 | 252 | 18000 |
| 7 | 19 | 62 | 28.9 | 5.6 | 7.9 | .2 | 16 | 1.4 | 5.1 | .5 | 30 | 137 | 170 | 30 | 133 | 62 | .1 | 274 | 800 |
| 7 | 26 | 62 | 29.4 | 5.6 | 7.9 | 1.4 | 22 | 1.0 | 4.2 | .5 | 38 | 124 | 167 | 20 | 73 | 78 | .1 | 305 | 200 |
| 8 | 2 | 62 | 29.4 | 5.2 | 7.7 | .2 | 13 | 1.2 | 4.5 | .8 | 23 | 124 | 167 | 15 | 108 | 67 | .1 | 267 | - |
| 8 | 9 | 62 | 28.9 | 5.7 | 8.0 | .2 | 16 | 1.4 | 4.5 | .4 | 21 | 128 | 163 | 20 | 120 | 65 | .1 | 262 | 800 |
| 8 | 16 | 62 | 28.3 | 5.5 | 7.9 | .1 | 16 | 1.0 | 3.6 | .7 | 19 | 134 | 167 | 20 | 145 | 55 | .2 | 290 | 1800 |
| 8 | 23 | 62 | 28.3 | 7.1 | 7.9 | .5 | 13 | 1.0 | 3.4 | .4 | 23 | 142 | 176 | 15 | 73 | 40 | .2 | 253 | 200 |
| 8 | 29 | 62 | 26.7 | 6.1 | 7.7 | .6 | 13 | 1.1 | 3.4 | .8 | 36 | 148 | 185 | 15 | 37 | 62 | .2 | 316 | - |
| 9 | 6 | 62 | 26.1 | 5.9 | 8.0 | .6 | 11 | 1.0 | 3.0 | .6 | 30 | 154 | 187 | 20 | 27 | 61 | .2 | 290 | 9200 |
| 9 | 13 | 62 | 25.6 | 6.9 | 8.0 | 1.0 | 8 | 1.0 | 3.2 | .7 | 30 | 161 | 197 | 15 | 24 | 62 | .2 | 316 | - |
| 9 | 20 | 62 | 25.0 | 6.9 | 8.0 | .6 | 18 | 1.1 | 3.2 | .6 | 26 | 146 | 184 | 15 | 36 | 64 | .5 | 280 | 23000 |
| 9 | 27 | 62 | 23.3 | 6.3 | 7.8 | .7 | 13 | 1.1 | 3.8 | .6 | 26 | 135 | 178 | 25 | 58 | 85 | .2 | 311 | 2000 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Red River Landing, Louisiana
Operated by U.S. Geological Survey

MAJOR BASIN Southwest-Lower Mississippi River

MINOR BASIN Lower Mississippi-Natchez to Gulf

STATION LOCATION Mississippi River at
New Orleans, Louisiana

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 363.000 | 224.000 | 581.000 | 805.000 | 748.000 | 645.000 | 1051.000 | 997.000 | 297.000 | 324.000 | 253.000 | 152.000 |
| 2 | 351.000 | 216.000 | 571.000 | 796.000 | 765.000 | 665.000 | 1051.000 | 992.000 | 296.000 | 315.000 | 254.000 | 152.000 |
| 3 | 349.000 | 211.000 | 558.000 | 772.000 | 781.000 | 697.000 | 1054.000 | 986.000 | 300.000 | 304.000 | 259.000 | 153.000 |
| 4 | 346.000 | 209.000 | 536.000 | 715.000 | 800.000 | 743.000 | 1054.000 | 982.000 | 300.000 | 293.000 | 262.000 | 152.000 |
| 5 | 353.000 | 206.000 | 518.000 | 673.000 | 812.000 | 773.000 | 1057.000 | 964.000 | 321.000 | 284.000 | 261.000 | 152.000 |
| 6 | 363.000 | 206.000 | 496.000 | 638.000 | 825.000 | 800.000 | 1069.000 | 934.000 | 326.000 | 278.000 | 254.000 | 156.000 |
| 7 | 358.000 | 203.000 | 472.000 | 603.000 | 840.000 | 821.000 | 1072.000 | 902.000 | 336.000 | 271.000 | 248.000 | 160.000 |
| 8 | 342.000 | 203.000 | 451.000 | 568.000 | 850.000 | 840.000 | 1072.000 | 855.000 | 346.000 | 263.000 | 248.000 | 166.000 |
| 9 | 327.000 | 211.000 | 445.000 | 537.000 | 859.000 | 862.000 | 1074.000 | 803.000 | 362.000 | 257.000 | 236.000 | 172.000 |
| 10 | 310.000 | 240.000 | 442.000 | 501.000 | 863.000 | 903.000 | 1074.000 | 766.000 | 379.000 | 255.000 | 224.000 | 177.000 |
| 11 | 298.000 | 281.000 | 442.000 | 474.000 | 863.000 | 939.000 | 1074.000 | 742.000 | 394.000 | 253.000 | 216.000 | 184.000 |
| 12 | 294.000 | 331.000 | 448.000 | 456.000 | 863.000 | 954.000 | 1079.000 | 719.000 | 404.000 | 253.000 | 208.000 | 187.000 |
| 13 | 291.000 | 378.000 | 475.000 | 461.000 | 863.000 | 975.000 | 1081.000 | 694.000 | 409.000 | 259.000 | 206.000 | 194.000 |
| 14 | 289.000 | 422.000 | 457.000 | 490.000 | 821.000 | 975.000 | 1081.000 | 663.000 | 411.000 | 267.000 | 211.000 | 200.000 |
| 15 | 284.000 | 433.000 | 472.000 | 516.000 | 812.000 | 992.000 | 1081.000 | 628.000 | 417.000 | 274.000 | 211.000 | 209.000 |
| 16 | 276.000 | 436.000 | 493.000 | 550.000 | 802.000 | 1012.000 | 1078.000 | 590.000 | 426.000 | 274.000 | 210.000 | 219.000 |
| 17 | 260.000 | 430.000 | 527.000 | 564.000 | 794.000 | 1034.000 | 1060.000 | 551.000 | 434.000 | 265.000 | 205.000 | 225.000 |
| 18 | 250.000 | 413.000 | 587.000 | 587.000 | 783.000 | 1043.000 | 1049.000 | 519.000 | 443.000 | 264.000 | 199.000 | 227.000 |
| 19 | 246.000 | 386.000 | 614.000 | 613.000 | 769.000 | 1045.000 | 1049.000 | 496.000 | 447.000 | 264.000 | 193.000 | 231.000 |
| 20 | 244.000 | 368.000 | 641.000 | 619.000 | 739.000 | 1045.000 | 1040.000 | 478.000 | 443.000 | 261.000 | 186.000 | 236.000 |
| 21 | 250.000 | 358.000 | 654.000 | 621.000 | 719.000 | 1005.000 | 1033.000 | 468.000 | 441.000 | 258.000 | 178.000 | 242.000 |
| 22 | 258.000 | 351.000 | 671.000 | 623.000 | 702.000 | 1009.000 | 1033.000 | 448.000 | 438.000 | 258.000 | 171.000 | 244.000 |
| 23 | 264.000 | 349.000 | 692.000 | 625.000 | 685.000 | 1020.000 | 1026.000 | 423.000 | 441.000 | 258.000 | 167.000 | 242.000 |
| 24 | 267.000 | 368.000 | 709.000 | 625.000 | 670.000 | 1033.000 | 1012.000 | 404.000 | 434.000 | 261.000 | 163.000 | 238.000 |
| 25 | 270.000 | 386.000 | 726.000 | 625.000 | 648.000 | 1039.000 | 1012.000 | 387.000 | 424.000 | 265.000 | 160.000 | 244.000 |
| 26 | 269.000 | 424.000 | 744.000 | 628.000 | 639.000 | 1040.000 | 1005.000 | 374.000 | 407.000 | 265.000 | 159.000 | 247.000 |
| 27 | 265.000 | 484.000 | 758.000 | 653.000 | 630.000 | 1042.000 | 1005.000 | 358.000 | 377.000 | 269.000 | 158.000 | 246.000 |
| 28 | 254.000 | 530.000 | 765.000 | 673.000 | 630.000 | 1042.000 | 1019.000 | 342.000 | 355.000 | 265.000 | 156.000 | 240.000 |
| 29 | 247.000 | 555.000 | 776.000 | 690.000 |  | 1042.000 | 1019.000 | 325.000 | 339.000 | 261.000 | 154.000 | 231.000 |
| 30 | 236.000 | 574.000 | 782.000 | 710.000 |  | 1042.000 | 1005.000 | 313.000 | 332.000 | 258.000 | 152.000 | 224.000 |
| 31 | 229.000 |  | 790.000 | 728.000 |  | 1049.000 |  | 304.000 |  | 253.000 | 152.000 |  |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 13 | 61 | 10 | 23 | 6500 | 62 | 10 | 52 | 0 | 2 | 5 | 1 | 1 | 3 | 0 | 1 | 1 | 0 | 1 |
| 11 | 10 | 61 | 11 | 20 | 6500 | * | 8 | * | 0 | 1 | 5 | 1 | 1 | 3 | 0 | 1 | 0 | 0 | 1 |
| 12 | 11 | 61 | 12 | 21 | 6500# | 64 | 9 | 55 | 0 | 1 | 5 | 1 | 1 | 3 | 0 | 1 | 1 | 0 | 1 |
| 1 | 17 | 62 | 1 | 26 | 5850 | 85 | 25 | 60 | 1 | 7 | 8 | 1 | 1 | 6 | 0 | 3 | 2 | 1 | 3 |
| 2 | 12 | 62 | 2 | 23 | 7150# | 83 | 21 | 62 | 1 | 5 | 7 | 1 | 1 | 5 | 0 | 3 | 2 | 0 | 3 |
| 3 | 9 | 62 | 3 | 19 | 6500# | 80 | 20 | 60 | 0 | 4 | 7 | 1 | 1 | 4 | 1 | 3 | 2 | 0 | 4 |
| 4 | 5 | 62 | 4 | 16 | 5900# | 105 | 37 | 68 | 2 | 11 | 12 | 1 | 1 | 9 | 1 | 4 | 3 | 1 | 4 |
| 5 | 10 | 62 | 5 | 21 | 6600# | 82 | 36 | 46 | 2 | 10 | 8 | 1 | 1 | 6 | 0 | 4 | 4 | 0 | 8 |
| 6 | 6 | 62 | 6 | 15 | 5400# | 61 | 27 | 34 | 2 | 7 | 6 | 1 | 1 | 4 | 0 | 3 | 2 | 1 | 6 |
| 7 | 9 | 62 | 7 | 18 | 5400# | 63 | 26 | 37 | 0 | 8 | 7 | 1 | 1 | 5 | 0 | 3 | 2 | 0 | 6 |
| 8 | 6 | 62 | 8 | 15 | 5400# | 62 | 20 | 42 | 1 | 7 | 5 | 1 | 1 | 3 | 0 | 2 | 1 | 0 | 4 |
| 9 | 10 | 62 | 9 | 19 | 5400# | 66 | 16 | 50 | 0 | 5 | 6 | 1 | 0 | 4 | 1 | 2 | 1 | 0 | 2 |

# ESTIMATED

* LABORATORY ACCIDENT

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** MISSISSIPPI

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** LOWER MISSISSIPPI-YAZOO RIVERS

**STATION LOCATION** MISSISSIPPI RIVER AT
VICKSBURG, MISSISSIPPI 21

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 13 | – | – | – | – | – | – | 20 | 11 | 6 | 7 | 26 | 13 | | | | | | |
| 10 | 9 | 61 | 10 | 24 | – | – | – | – | – | – | 56 | 11 | 11 | 7 | 67 | 13 | | | | | | |
| 10 | 16 | 61 | 10 | 27 | 0 | 1 | 1 | 1 | 1 | 1 | 32 | 8 | 46 | 7 | 78 | 11 | | | | | | |
| 10 | 23 | 61 | 11 | 1 | 7 | 5 | 1 | 1 | 8 | 5 | 28 | 9 | 10 | 6 | 38 | 11 | | | | | | |
| 10 | 30 | 61 | 11 | 7 | 4 | 4 | 1 | 1 | 5 | 4 | 33 | 8 | 13 | 6 | 46 | 10 | | | | | | |
| 11 | 6 | 61 | 11 | 17 | 2 | 2 | 1 | 1 | 3 | 2 | 24 | 6 | 28 | 6 | 52 | 8 | | | | | | |
| 11 | 13 | 61 | 11 | 24 | 3 | 3 | 1 | 1 | 4 | 3 | 112 | 10 | 30 | 6 | 142 | 12 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | 3 | 4 | 1 | 1 | 4 | 4 | 75 | 10 | 34 | 6 | 109 | 12 | | | | | | |
| 11 | 27 | 61 | 12 | 7 | 2 | 3 | 3 | 2 | 5 | 4 | 76 | 11 | 44 | 7 | 120 | 13 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | 1 | 1 | 0 | 1 | 1 | 1 | 46 | 8 | 39 | 7 | 85 | 11 | | | | | | |
| 12 | 11 | 61 | 12 | 19 | 2 | 2 | 1 | 1 | 3 | 2 | 89 | 9 | 40 | 6 | 129 | 11 | | | | | | |
| 12 | 18 | 61 | 12 | 28 | 5 | 3 | 0 | 1 | 5 | 3 | 81 | 8 | 26 | 5 | 107 | 9 | | | | | | |
| 12 | 26 | 61 | 1 | 11 | 3 | 2 | 0 | 1 | 3 | 2 | 36 | 5 | 31 | 5 | 67 | 8 | | | | | | |
| 1 | 2 | 62 | 1 | 11 | 1 | 1 | 0 | 0 | 1 | 1 | 53 | 8 | 23 | 6 | 76 | 10 | | | | | | |
| 1 | 8 | 62 | 1 | 19 | 1 | 1 | 0 | 1 | 1 | 1 | 134 | 8 | 62 | 5 | 196 | 9 | | | | | | |
| 1 | 15 | 62 | 1 | 25 | 5 | 3 | 0 | 1 | 5 | 3 | 151 | 10 | 54 | 6 | 205 | 12 | | | | | | |
| 1 | 22 | 62 | 2 | 6 | 7 | 4 | 0 | 1 | 7 | 4 | 170 | 11 | 43 | 5 | 213 | 12 | | | | | | |
| 1 | 29 | 62 | 2 | 12 | 1 | 1 | 0 | 1 | 1 | 1 | 83 | 7 | 46 | 5 | 129 | 9 | | | | | | |
| 2 | 5 | 62 | 2 | 15 | 3 | 3 | 0 | 1 | 3 | 3 | 94 | 9 | 35 | 5 | 129 | 10 | | | | | | |
| 2 | 12 | 62 | 2 | 21 | 1 | 1 | 0 | 1 | 1 | 1 | 55 | 6 | 42 | 6 | 97 | 8 | | | | | | |
| 2 | 19 | 62 | 3 | 5 | 3 | 2 | 0 | 1 | 3 | 2 | 67 | 7 | 28 | 5 | 95 | 9 | | | | | | |
| 2 | 26 | 62 | 3 | 9 | 2 | 1 | 1 | 1 | 3 | 1 | 57 | 7 | 36 | 6 | 93 | 9 | | | | | | |
| 3 | 5 | 62 | 3 | 16 | 2 | 3 | 0 | 1 | 2 | 3 | 113 | 10 | 35 | 5 | 148 | 11 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | 3 | 3 | 1 | 1 | 4 | 3 | 88 | 9 | 36 | 5 | 124 | 10 | | | | | | |
| 3 | 19 | 62 | 3 | 29 | 4 | 3 | 0 | 2 | 4 | 3 | 71 | 23 | 26 | 19 | 97 | 30 | | | | | | |
| 3 | 26 | 62 | 4 | 5 | 5 | 2 | 0 | 1 | 5 | 2 | 68 | 11 | 31 | 5 | 99 | 12 | | | | | | |
| 4 | 2 | 62 | 4 | 13 | 2 | 2 | 0 | 2 | 2 | 3 | 75 | 8 | 33 | 6 | 108 | 10 | | | | | | |
| 4 | 9 | 62 | 4 | 24 | 4 | 4 | 0 | 1 | 4 | 4 | 75 | 9 | 31 | 5 | 106 | 10 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | 2 | 1 | 1 | 1 | 3 | 1 | 38 | 6 | 29 | 6 | 67 | 8 | | | | | | |
| 4 | 23 | 62 | 5 | 28 | 0 | 1 | 0 | 1 | 0 | 1 | 27 | 5 | 32 | 6 | 59 | 7 | | | | | | |
| 4 | 30 | 62 | 6 | 5 | 1 | 1 | 0 | 1 | 1 | 1 | 42 | 7 | 38 | 7 | 80 | 10 | | | | | | |
| 5 | 7 | 62 | 6 | 13 | 1 | 1 | 0 | 1 | 1 | 1 | 46 | 9 | 33 | 8 | 79 | 12 | | | | | | |
| 5 | 14 | 62 | 6 | 19 | 6 | 3 | 3 | 1 | 9 | 3 | 37 | 9 | 30 | 7 | 67 | 11 | | | | | | |
| 5 | 21 | 62 | 6 | 28 | 1 | 1 | 0 | 1 | 1 | 1 | 135 | 6 | 19 | 7 | 154 | 9 | | | | | | |
| 5 | 28 | 62 | 7 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 21 | 8 | 28 | 7 | 49 | 11 | | | | | | |
| 6 | 4 | 62 | 7 | 5 | 4 | 3 | 2 | 2 | 6 | 4 | 37 | 11 | 28 | 10 | 65 | 15 | | | | | | |
| 6 | 11 | 62 | 7 | 9 | 10 | 7 | 1 | 1 | 11 | 7 | 88 | 40 | 35 | 8 | 123 | 41 | | | | | | |
| 6 | 18 | 62 | 7 | 18 | 0 | 6 | 0 | 1 | 0 | 6 | 98 | 63 | 35 | 8 | 133 | 64 | | | | | | |
| 6 | 25 | 62 | 7 | 24 | 5 | 5 | 0 | 1 | 5 | 5 | 69 | 58 | 33 | 33 | 102 | 67 | | | | | | |
| 7 | 2 | 62 | 7 | 24 | 3 | 3 | 0 | 1 | 3 | 3 | 43 | 10 | 22 | 7 | 65 | 12 | | | | | | |
| 7 | 9 | 62 | 8 | 17 | – | – | – | – | – | – | 13 | 8 | 26 | 8 | 39 | 11 | | | | | | |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** LOWER MISSISSIPPI-YAZOO RIVERS

**STATION LOCATION** MISSISSIPPI RIVER AT

VICKSBURG, MISSISSIPPI 21

| DATE AMPLE AKEN | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 16 | 62 | 8 | 7 | 2 | 2 | 1 | 1 | 3 | 2 | 27 | 9 | 29 | 8 | 56 | 12 | | | | | | |
| 23 | 62 | 8 | 24 | 2 | 1 | 1 | 2 | 3 | 2 | 11 | 8 | 14 | 9 | 25 | 12 | | | | | | |
| 30 | 62 | 8 | 22 | 1 | 1 | 0 | 1 | 1 | 1 | 14 | 8 | 19 | 7 | 33 | 11 | | | | | | |
| 6 | 62 | 8 | 28 | 6 | 3 | 1 | 1 | 7 | 3 | 40 | 10 | 30 | 7 | 70 | 12 | | | | | | |
| 13 | 62 | 10 | 9 | 3 | 3 | 1 | 1 | 4 | 3 | 38 | 36 | 21 | 9 | 59 | 37 | | | | | | |
| 20 | 62 | 9 | 5 | 2 | 2 | 1 | 1 | 3 | 2 | 23 | 14 | 22 | 8 | 45 | 16 | | | | | | |
| 27 | 62 | 9 | 17 | 5 | 4 | 2 | 2 | 7 | 4 | 35 | 38 | 35 | 16 | 70 | 41 | | | | | | |
| 4 | 62 | 9 | 21 | 2 | 1 | 3 | 3 | 5 | 3 | 21 | 7 | 37 | 14 | 58 | 16 | | | | | | |
| 10 | 62 | 9 | 21 | 1 | 1 | 1 | 1 | 2 | 1 | 19 | 8 | 21 | 9 | 40 | 12 | | | | | | |
| 17 | 62 | 10 | 15 | 0 | 1 | 1 | 1 | 1 | 1 | 11 | 13 | 22 | 8 | 33 | 15 | | | | | | |
| 24 | 62 | 10 | 16 | 2 | 2 | 0 | 1 | 2 | 2 | 30 | 17 | 22 | 9 | 52 | 19 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** MISSISSIPPI
**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER
**MINOR BASIN** LOWER MISSISSIPPI-YAZOO RIVERS
**STATION LOCATION** MISSISSIPPI RIVER AT
VICKSBURG, MISSISSIPPI 21

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 600 | 0 | 20 | 70 | 0 | 40 | 0 | 360 | 70 | 130 | 70 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 1400 | 0 | 40 | 230 | 0 | 170 | 0 | 640 | 290 | 250 | 150 | 92 | 1 | 69 | 1 | 71 | 1 | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 1600 | 0 | 60 | 150 | 0 | 150 | 0 | 810 | 390 | 390 | 190 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 700 | 0 | 20 | 60 | 0 | 40 | 0 | 440 | 100 | 40 | 60 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 500 | 0 | 0 | 0 | 0 | 70 | 0 | 360 | 90 | 270 | 90 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 400 | 0 | 0 | 20 | 0 | 0 | 0 | 270 | 100 | 0 | 120 | 69 | 2 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 800 | 0 | 0 | 50 | 0 | 0 | 20 | 520 | 200 | 70 | 70 | 69 | 1 | 71 | 1 | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 1000 | 0 | 0 | 0 | 0 | 20 | 40 | 770 | 120 | 60 | 190 | 71 | 3 | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 200 | 230 | 70 | 50 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 200 | 0 | 0 | 0 | 0 | 20 | 50 | 70 | 90 | 110 | 160 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 200 | 0 | 0 | 0 | 0 | 40 | 20 | 90 | 20 | 40 | 40 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 500 | 0 | 0 | 20 | 0 | 120 | 20 | 170 | 170 | 120 | 120 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 600 | 20 | 0 | 20 | 0 | 20 | 20 | 290 | 250 | 80 | 60 | 71 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 900 | 0 | 0 | 80 | 0 | 290 | 80 | 210 | 250 | 80 | 120 | 51 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 1300 | 0 | 0 | 170 | 80 | 40 | 0 | 760 | 210 | 1100 | 80 | 71 | 2 | 69 | 1 | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 3900 | 0 | 20 | 330 | 660 | 660 | 40 | 1550 | 620 | 580 | 60 | 71 | 3 | 50 | 3 | 69 | 3 | 57 | 2 | 92 | 1 | 68 | 1 | | | | | | | | |
| 6 | 4 | 62 | 2100 | 40 | 20 | 150 | 20 | 80 | 0 | 1430 | 390 | 230 | 40 | 69 | 3 | 71 | 2 | 92 | 1 | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 1400 | 20 | 0 | 40 | 0 | 60 | 0 | 660 | 580 | 100 | 0 | 71 | 2 | 69 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 1000 | 0 | 0 | 0 | 20 | 20 | 20 | 480 | 440 | 80 | 100 | 71 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 1700 | 0 | 0 | 120 | 20 | 80 | 0 | 950 | 540 | 170 | 40 | 68 | 3 | 69 | 1 | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 500 | 0 | 0 | 60 | 0 | 20 | 40 | 210 | 170 | 170 | 80 | | | | | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 500 | 0 | 0 | 170 | 0 | 0 | 60 | 210 | 80 | 170 | 40 | | | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 6500 | 2940 | 0 | 250 | 60 | 250 | 0 | 2260 | 700 | 250 | 120 | 2 | 5 | 67 | 4 | 69 | 2 | 68 | 2 | 92 | 1 | 38 | 1 | 88 | 1 | | | | | | |
| 9 | 17 | 62 | 2800 | 0 | 0 | 270 | 0 | 140 | 0 | 1900 | 460 | 500 | 210 | 69 | 4 | 71 | 2 | 68 | 1 | 87 | 1 | 88 | 1 | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 0 | 2 | 61 | 56 | 68 | 53 | 4 | 92 | 4 | 26 | 3 | 21 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 0 | 16 | 61 | 56 | 64 | 58 | 15 | 92 | 7 | 83 | 2 | 12 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 6 | 61 | 56 | 46 | 58 | 39 | 92 | 4 | 5 | 3 | 8 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 20 | 61 | 83 | 41 | 92 | 21 | 56 | 19 | 47 | 4 | 15 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 4 | 61 | 56 | 34 | 83 | 30 | 80 | 13 | 92 | 7 | 16 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 18 | 61 | 56 | 44 | 83 | 15 | 92 | 4 | 5 | 11 | 16 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 56 | 36 | 80 | 12 | 83 | 7 | 89 | 7 | 38 | 200 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 56 | 29 | 80 | 9 | 83 | 9 | 89 | 9 | 44 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 70 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 56 | 21 | 92 | 18 | 83 | 8 | 26 | 6 | 47 | 0 | 10 | 0 | | | | | | | | | | | 5 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 62 | 40 | 92 | 26 | 56 | 13 | 80 | 2 | 19 | 0 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 62 | 41 | 92 | 17 | 56 | 6 | 80 | 5 | 31 | 20 | 10 | 9 | | | | | | | | | | | 5 | 50 | 1 | | | | | 0 | 0 |
| 5 | 7 | 62 | 56 | 28 | 80 | 19 | 62 | 8 | 82 | 8 | 37 | 0 | 0 | 1 | | | | | | | | | | | 5 | 76 | 1 | | | | | 0 | 0 |
| 5 | 21 | 62 | 80 | 30 | 56 | 27 | 58 | 12 | 92 | 7 | 24 | 20 | 0 | 75 | 11 | 4 | 17 | 1 | 2 | 1 | 21 | 1 | | | 10 | 50 | 1 | | | | | 0 | 0 |
| 6 | 4 | 62 | 56 | 38 | 80 | 30 | 58 | 16 | 89 | 6 | 10 | 0 | 0 | 0 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 92 | 21 | 80 | 16 | 71 | 9 | 56 | 8 | 46 | 0 | 0 | 0 | | | | | | | | | | | 4 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 26 | 18 | 80 | 18 | 83 | 13 | 56 | 10 | 41 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 26 | 71 | 20 | 12 | 56 | 4 | 80 | 3 | 10 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 58 | 23 | 56 | 14 | 26 | 13 | 75 | 8 | 42 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 56 | 29 | 58 | 21 | 26 | 9 | 20 | 9 | 32 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 20 | 49 | 26 | 23 | 56 | 13 | 58 | 13 | 2 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 58 | 27 | 82 | 21 | 26 | 20 | 56 | 9 | 23 | 0 | 0 | 16 | 17 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |

## NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** MISSISSIPPI
**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER
**MINOR BASIN** LOWER MISSISSIPPI-YAZOO RIVERS
**STATION LOCATION** MISSISSIPPI RIVER AT
VICKSBURG, MISSISSIPPI 21

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 23.0 | - | 8.0 | - | - | - | - | - | - | 80 | 130 | 0 | 400 | - | - | - | - |
| 10 | 9 | 61 | 21.0 | - | 7.8 | - | - | - | - | - | - | 100 | 110 | 0 | 500 | - | - | - | - |
| 10 | 16 | 61 | 20.0 | - | 7.9 | - | 23 | - | - | - | - | 96 | 124 | - | 300 | - | - | - | - |
| 10 | 23 | 61 | 19.0 | - | 8.0 | - | - | - | - | - | - | 120 | 160 | - | 700 | - | - | - | - |
| 10 | 30 | 61 | 18.0 | - | 8.0 | - | - | - | - | - | - | 114 | 156 | - | 550 | - | - | - | - |
| 11 | 6 | 61 | 18.0 | - | 8.0 | - | - | - | - | - | - | 114 | 162 | - | 275 | - | - | - | - |
| 11 | 13 | 61 | - | - | 7.8 | - | - | - | - | - | - | 130 | 166 | - | 1000 | - | - | - | - |
| 11 | 20 | 61 | - | - | 7.7 | - | 25 | - | - | - | - | 80 | 100 | - | 450 | - | - | - | - |
| 11 | 27 | 61 | - | - | 8.0 | - | - | - | - | - | - | 108 | 146 | - | 500 | - | - | - | - |
| 12 | 4 | 61 | - | - | 7.6 | - | - | - | - | - | - | 78 | 108 | - | 340 | - | - | - | - |
| 12 | 11 | 61 | 12.0 | - | 7.6 | - | - | - | - | - | - | 68 | 102 | - | 250 | - | - | - | - |
| 12 | 18 | 61 | 10.0 | - | 7.4 | - | 20 | - | - | - | - | 48 | 82 | - | - | - | - | - | - |
| 12 | 26 | 61 | - | - | 7.4 | - | - | - | - | - | - | 44 | 90 | - | 230 | - | - | - | - |
| 1 | 2 | 62 | 6.0 | - | 7.2 | - | - | - | - | - | 18 | 36 | 66 | 20 | 130 | 16 | .1 | 92 | - |
| 1 | 8 | 62 | 7.0 | - | 7.2 | - | - | - | - | - | 8 | 40 | 60 | 10 | 290 | 16 | .1 | - | - |
| 1 | 15 | 62 | 4.0 | - | 7.3 | - | - | - | - | - | 9 | 44 | 84 | - | 250 | 21 | .0 | - | - |
| 1 | 22 | 62 | 6.0 | - | 7.4 | - | - | - | - | - | - | 50 | 86 | - | 380 | - | - | 89 | - |
| 1 | 29 | 62 | 7.0 | - | 7.6 | - | - | - | - | - | 8 | 44 | 70 | 20 | 350 | 9 | .0 | - | - |
| 2 | 5 | 62 | 8.0 | - | 7.4 | - | - | - | - | - | - | 52 | 92 | 20 | 300 | - | - | - | - |
| 2 | 12 | 62 | 9.0 | - | 7.4 | - | - | - | - | - | - | 60 | 96 | - | 200 | - | - | - | - |
| 2 | 19 | 62 | 10.0 | - | 7.4 | - | - | - | - | - | 12 | 72 | 106 | 20 | 240 | 39 | - | - | - |
| 2 | 26 | 62 | 11.0 | - | 7.7 | - | - | - | - | - | 15 | 86 | 112 | 5 | 200 | 35 | .0 | - | - |
| 3 | 5 | 62 | 9.0 | - | 7.6 | - | - | - | - | - | - | 66 | 96 | - | 280 | - | - | - | - |
| 3 | 12 | 62 | 9.0 | - | 7.6 | - | - | - | - | - | - | 50 | 84 | - | 280 | - | - | - | - |
| 3 | 19 | 62 | 9.0 | - | 7.5 | - | 8 | - | - | - | - | 60 | 52 | - | 200 | - | - | - | - |
| 3 | 26 | 62 | 11.0 | - | 7.6 | - | - | - | - | - | 24 | 64 | 104 | 10 | 150 | 40 | - | - | - |
| 4 | 2 | 62 | 12.0 | - | 7.6 | - | - | - | - | - | 16 | 72 | 106 | 10 | - | 41 | .0 | - | - |
| 4 | 9 | 62 | 13.0 | - | 7.7 | - | - | - | - | - | 11 | 80 | 106 | 5 | 180 | 42 | - | - | - |
| 4 | 16 | 62 | 14.0 | - | 7.7 | - | - | - | - | - | 11 | 80 | 106 | 20 | 160 | 38 | - | 239 | - |
| 4 | 23 | 62 | 15.0 | - | 7.3 | - | 15 | - | - | - | 12 | 36 | 100 | 5 | 120 | 38 | - | 167 | - |
| 4 | 30 | 62 | 19.0 | - | 7.7 | - | - | - | - | - | 9 | 88 | 106 | 5 | 100 | 34 | .0 | - | - |
| 5 | 7 | 62 | 21.0 | - | 7.4 | - | - | - | - | - | - | 74 | 88 | - | 100 | - | - | - | - |
| 5 | 14 | 62 | 22.0 | - | 7.7 | - | - | - | - | - | 10 | 80 | 100 | 15 | 170 | 40 | .0 | - | - |
| 5 | 21 | 62 | 25.0 | - | 7.7 | - | 28 | - | - | - | 10 | 100 | 110 | 10 | 160 | 39 | .1 | - | - |
| 5 | 28 | 62 | 26.0 | - | 7.6 | - | - | - | - | - | 11 | 96 | 108 | 10 | 220 | 39 | .1 | - | - |
| 6 | 4 | 62 | 26.0 | - | 7.4 | - | - | - | - | - | 25 | 130 | 150 | - | 280 | 58 | - | - | - |
| 6 | 11 | 62 | 27.0 | - | 7.9 | - | - | - | - | - | - | 120 | 140 | - | 700 | - | - | - | - |
| 6 | 15 | 62 | - | - | - | - | 26 | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 18 | 62 | 27.0 | - | 7.8 | - | - | - | - | - | - | 120 | 125 | - | 700 | - | - | - | - |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Vicksburg, Mississippi
Operated by U.S. Geological Survey

MAJOR BASIN Southwest-Lower Mississippi River

MINOR BASIN Lower Mississippi-Yazoo Rivers

STATION LOCATION Mississippi River at Vicksburg, Mississippi

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 470.000 | 286.000 | 694.000 | 906.000 | 950.000 | 838.000 | 1418.000 | 1225.000 | 393.000 | 420.000 | 406.000 | 223.000 |
| 2 | 461.000 | 282.000 | 668.000 | 884.000 | 978.000 | 870.000 | 1434.000 | 1192.000 | 403.000 | 412.000 | 413.000 | 226.000 |
| 3 | 467.000 | 276.000 | 636.000 | 865.000 | 1014.000 | 926.000 | 1436.000 | 1158.000 | 416.000 | 404.000 | 408.000 | 226.000 |
| 4 | 473.000 | 269.000 | 601.000 | 840.000 | 1046.000 | 994.000 | 1430.000 | 1128.000 | 428.000 | 397.000 | 396.000 | 224.000 |
| 5 | 470.000 | 265.000 | 577.000 | 800.000 | 1076.000 | 1055.000 | 1414.000 | 1088.000 | 435.000 | 388.000 | 384.000 | 227.000 |
| 6 | 460.000 | 261.000 | 559.000 | 740.000 | 1093.000 | 1080.000 | 1408.000 | 1042.000 | 444.000 | 382.000 | 373.000 | 232.000 |
| 7 | 439.000 | 269.000 | 542.000 | 680.000 | 1107.000 | 1100.000 | 1410.000 | 990.000 | 460.000 | 370.000 | 360.000 | 238.000 |
| 8 | 419.000 | 294.000 | 525.000 | 632.000 | 1116.000 | 1175.000 | 1414.000 | 950.000 | 508.000 | 356.000 | 348.000 | 243.000 |
| 9 | 404.000 | 364.000 | 513.000 | 604.000 | 1122.000 | 1232.000 | 1420.000 | 900.000 | 545.000 | 340.000 | 336.000 | 249.000 |
| 10 | 397.000 | 441.000 | 504.000 | 578.000 | 1124.000 | 1268.000 | 1421.000 | 858.000 | 560.000 | 332.000 | 324.000 | 254.000 |
| 11 | 393.000 | 510.000 | 490.000 | 560.000 | 1118.000 | 1296.000 | 1422.000 | 822.000 | 566.000 | 350.000 | 315.000 | 258.000 |
| 12 | 394.000 | 561.000 | 488.000 | 566.000 | 1108.000 | 1318.000 | 1418.000 | 788.000 | 562.000 | 374.000 | 304.000 | 264.000 |
| 13 | 389.000 | 599.000 | 498.000 | 588.000 | 1094.000 | 1338.000 | 1412.000 | 756.000 | 545.000 | 390.000 | 298.000 | 270.000 |
| 14 | 377.000 | 611.000 | 520.000 | 618.000 | 1074.000 | 1350.000 | 1398.000 | 730.000 | 570.000 | 396.000 | 286.000 | 274.000 |
| 15 | 360.000 | 592.000 | 551.000 | 636.000 | 1052.000 | 1358.000 | 1380.000 | 696.000 | 594.000 | 392.000 | 286.000 | 279.000 |
| 16 | 340.000 | 565.000 | 587.000 | 653.000 | 1027.000 | 1365.000 | 1368.000 | 660.000 | 610.000 | 386.000 | 300.000 | 280.000 |
| 17 | 327.000 | 535.000 | 630.000 | 667.000 | 1000.000 | 1372.000 | 1356.000 | 615.000 | 622.000 | 380.000 | 293.000 | 281.000 |
| 18 | 311.000 | 512.000 | 678.000 | 682.000 | 972.000 | 1378.000 | 1347.000 | 592.000 | 628.000 | 376.000 | 280.000 | 288.000 |
| 19 | 322.000 | 489.000 | 712.000 | 696.000 | 942.000 | 1386.000 | 1338.000 | 585.000 | 626.000 | 372.000 | 264.000 | 292.000 |
| 20 | 336.000 | 468.000 | 734.000 | 708.000 | 920.000 | 1395.000 | 1332.000 | 576.000 | 622.000 | 367.000 | 254.000 | 314.000 |
| 21 | 342.000 | 456.000 | 750.000 | 724.000 | 894.000 | 1402.000 | 1326.000 | 570.000 | 610.000 | 364.000 | 247.000 | 314.000 |
| 22 | 354.000 | 452.000 | 766.000 | 734.000 | 868.000 | 1407.000 | 1322.000 | 558.000 | 594.000 | 370.000 | 241.000 | 312.000 |
| 23 | 365.000 | 468.000 | 794.000 | 736.000 | 840.000 | 1412.000 | 1316.000 | 540.000 | 580.000 | 384.000 | 238.000 | 314.000 |
| 24 | 367.000 | 503.000 | 821.000 | 736.000 | 820.000 | 1411.000 | 1312.000 | 510.000 | 562.000 | 396.000 | 234.000 | 322.000 |
| 25 | 361.000 | 561.000 | 847.000 | 738.000 | 810.000 | 1400.000 | 1307.000 | 480.000 | 542.000 | 407.000 | 230.000 | 330.000 |
| 26 | 348.000 | 633.000 | 868.000 | 760.000 | 808.000 | 1375.000 | 1301.000 | 458.000 | 514.000 | 406.000 | 227.000 | 326.000 |
| 27 | 333.000 | 685.000 | 891.000 | 792.000 | 808.000 | 1362.000 | 1296.000 | 442.000 | 486.000 | 400.000 | 223.000 | 322.000 |
| 28 | 317.000 | 718.000 | 901.000 | 825.000 | 818.000 | 1358.000 | 1286.000 | 428.000 | 462.000 | 390.000 | 220.000 | 316.000 |
| 29 | 305.000 | 731.000 | 914.000 | 865.000 |  | 1358.000 | 1278.000 | 412.000 | 445.000 | 380.000 | 218.000 | 304.000 |
| 30 | 297.000 | 713.000 | 919.000 | 896.000 |  | 1375.000 | 1252.000 | 394.000 | 432.000 | 372.000 | 217.000 | 296.000 |
| 31 | 292.000 |  | 923.000 | 924.000 |  | 1400.000 |  | 390.000 |  | 374.000 | 220.000 |  |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 11 | 61 | 10 | 25 | - | - | - | - | - | - | 26 | 10 | 17 | 7 | 43 | 12 | | | | | | |
| 10 | 24 | 61 | 11 | 6 | - | - | - | - | - | - | 21 | 18 | 18 | 12 | 39 | 22 | | | | | | |
| 11 | 16 | 61 | 11 | 28 | - | - | - | - | - | - | 79 | 9 | 40 | 6 | 119 | 11 | | | | | | |
| 11 | 29 | 61 | 12 | 4 | 4 | 2 | 1 | 1 | 5 | 2 | 36 | 7 | 16 | 5 | 52 | 9 | | | | | | |
| 12 | 12 | 61 | 12 | 22 | - | - | - | - | - | - | 148 | 11 | 29 | 8 | 177 | 14 | | | | | | |
| 12 | 28 | 61 | 1 | 10 | 3 | 1 | 1 | 1 | 4 | 1 | 21 | 6 | 26 | 5 | 47 | 8 | | | | | | |
| 1 | 15 | 62 | 1 | 24 | 4 | 3 | 1 | 1 | 5 | 3 | 63 | 10 | 32 | 8 | 95 | 13 | | | | | | |
| 1 | 30 | 62 | 2 | 13 | - | - | - | - | - | - | 118 | 12 | 38 | 7 | 156 | 14 | | | | | | |
| 2 | 13 | 62 | 2 | 23 | 2 | 2 | 1 | 1 | 3 | 2 | 50 | 8 | 31 | 6 | 81 | 10 | | | | | | |
| 2 | 27 | 62 | 3 | 12 | - | - | - | - | - | - | 57 | 11 | 27 | 8 | 84 | 14 | | | | | | |
| 3 | 12 | 62 | 3 | 22 | 2 | 3 | 1 | 1 | 3 | 3 | 88 | 9 | 34 | 5 | 122 | 10 | | | | | | |
| 3 | 27 | 62 | 4 | 9 | - | - | - | - | - | - | 67 | 10 | 33 | 7 | 100 | 12 | | | | | | |
| 4 | 12 | 62 | 4 | 27 | 3 | 3 | 1 | 1 | 4 | 3 | 69 | 13 | 38 | 6 | 107 | 14 | | | | | | |
| 4 | 24 | 62 | 5 | 28 | - | - | - | - | - | - | 69 | 10 | 19 | 8 | 88 | 13 | | | | | | |
| 5 | 9 | 62 | 6 | 14 | 2 | 1 | 1 | 1 | 3 | 1 | 21 | 7 | 29 | 7 | 50 | 10 | | | | | | |
| 5 | 22 | 62 | 6 | 28 | - | - | - | - | - | - | 27 | 10 | 32 | 9 | 59 | 13 | | | | | | |
| 6 | 5 | 62 | 7 | 5 | 0 | 1 | 2 | 2 | 2 | 2 | 15 | 12 | 31 | 8 | 46 | 14 | | | | | | |
| 6 | 19 | 62 | 7 | 17 | - | - | - | - | - | - | 92 | 63 | 19 | 8 | 111 | 64 | | | | | | |
| 7 | 11 | 62 | 8 | 13 | 3 | 3 | 2 | 1 | 5 | 3 | 30 | 8 | 30 | 6 | 60 | 10 | | | | | | |
| 7 | 24 | 62 | 8 | 20 | - | - | - | - | - | - | 32 | 4 | 26 | 4 | 58 | 6 | | | | | | |
| 8 | 8 | 62 | 10 | 1 | 21 | 11 | 2 | 2 | 23 | 11 | 43 | 62 | 30 | 8 | 73 | 63 | | | | | | |
| 8 | 27 | 62 | 9 | 30 | - | - | - | - | - | - | 54 | 15 | 15 | 9 | 69 | 17 | | | | | | |
| 9 | 5 | 62 | 9 | 20 | 0 | 1 | 1 | 2 | 1 | 2 | 4 | 12 | 12 | 16 | 16 | 20 | | | | | | |
| 9 | 19 | 62 | 10 | 15 | - | - | - | - | - | - | 25 | 14 | 33 | 9 | 58 | 17 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** LOUISIANA
**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER
**MINOR BASIN** LOWER MISSISSIPPI-YAZOO RIVERS
**STATION LOCATION** MISSISSIPPI RIVER AT
DELTA, LOUISIANA 54

| DATE OF SAMPLE | | | ALGAE (Number per milliliter) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 11 | 61 | 800 | 20 | 0 | 290 | 40 | 0 | 0 | 290 | 150 | 100 | 120 | | | | | | | | | | | | | | | | | | | | |
| 10 | 24 | 61 | 500 | 0 | 40 | 60 | 0 | 40 | 0 | 250 | 150 | 40 | 20 | | | | | | | | | | | | | | | | | | | | |
| 11 | 16 | 61 | 700 | 0 | 40 | 20 | 0 | 20 | 0 | 520 | 130 | 60 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 29 | 61 | 800 | 0 | 60 | 20 | 0 | 0 | 0 | 500 | 210 | 60 | 120 | | | | | | | | | | | | | | | | | | | | |
| 12 | 12 | 61 | 1600 | 0 | 0 | 60 | 0 | 40 | 0 | 1180 | 270 | 100 | 190 | 69 | 3 | 71 | 2 | 92 | 1 | | | | | | | | | | | | | | |
| 12 | 28 | 61 | 1400 | 20 | 0 | 90 | 0 | 20 | 0 | 830 | 410 | 270 | 90 | 69 | 2 | 71 | 1 | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 1800 | 0 | 0 | 60 | 0 | 150 | 0 | 1430 | 190 | 80 | 120 | 71 | 4 | | | | | | | | | | | | | | | | | | |
| 1 | 30 | 62 | 700 | 0 | 0 | 50 | 0 | 70 | 0 | 180 | 380 | 50 | 50 | | | | | | | | | | | | | | | | | | | | |
| 2 | 13 | 62 | 400 | 0 | 0 | 50 | 0 | 0 | 0 | 170 | 230 | 20 | 20 | | | | | | | | | | | | | | | | | | | | |
| 2 | 27 | 62 | 1100 | 0 | 0 | 0 | 0 | 290 | 0 | 480 | 290 | 100 | 60 | 71 | 2 | 51 | 1 | | | | | | | | | | | | | | | | |
| 3 | 12 | 62 | 400 | 0 | 0 | 20 | 0 | 0 | 0 | 250 | 150 | 150 | 310 | | | | | | | | | | | | | | | | | | | | |
| 3 | 27 | 62 | 400 | 0 | 0 | 0 | 0 | 80 | 0 | 150 | 150 | 80 | 20 | | | | | | | | | | | | | | | | | | | | |
| 4 | 10 | 62 | 400 | 0 | 0 | 40 | 0 | 40 | 0 | 190 | 170 | 340 | 210 | | | | | | | | | | | | | | | | | | | | |
| 5 | 9 | 62 | 3200 | 0 | 0 | 60 | 650 | 250 | 0 | 2070 | 170 | 1630 | 300 | 71 | 4 | 50 | 3 | | | | | | | | | | | | | | | | |
| 5 | 22 | 62 | 5300 | 0 | 20 | 440 | 830 | 190 | 40 | 2860 | 930 | 950 | 100 | 71 | 4 | 50 | 3 | 69 | 2 | 92 | 2 | 68 | 1 | | | | | | | | | | |
| 6 | 5 | 62 | 2500 | 20 | 40 | 250 | 20 | 120 | 40 | 1470 | 500 | 520 | 100 | 71 | 3 | 69 | 3 | 92 | 2 | | | | | | | | | | | | | | |
| 6 | 19 | 62 | 1900 | 0 | 40 | 0 | 0 | 600 | 0 | 770 | 480 | 170 | 80 | 57 | 2 | 71 | 2 | 92 | 1 | 69 | 1 | | | | | | | | | | | | |
| 7 | 11 | 62 | 4400 | 0 | 40 | 130 | 40 | 0 | 0 | 2870 | 1310 | 630 | 630 | 68 | 4 | 67 | 2 | 69 | 2 | 88 | 2 | 92 | 1 | 71 | 1 | | | | | | | | |
| 7 | 24 | 62 | 3200 | 0 | 0 | 340 | 80 | 40 | 40 | 1650 | 1010 | 970 | 380 | 67 | 3 | 68 | 2 | 69 | 2 | 88 | 2 | 92 | 1 | 38 | 1 | | | | | | | | |
| 8 | 8 | 62 | 500 | 0 | 0 | 150 | 0 | 20 | 0 | 170 | 210 | 40 | 80 | | | | | | | | | | | | | | | | | | | | |
| 8 | 27 | 62 | 1700 | 0 | 0 | 120 | 40 | 60 | 0 | 910 | 540 | 170 | 0 | 67 | 2 | 69 | 2 | 92 | 1 | | | | | | | | | | | | | | |
| 9 | 5 | 62 | 2600 | 0 | 0 | 270 | 0 | 190 | 40 | 1660 | 410 | 410 | 170 | 67 | 3 | 69 | 2 | 88 | 1 | 68 | 1 | | | | | | | | | | | | |
| 9 | 19 | 62 | 2000 | 100 | 0 | 230 | 0 | 230 | 0 | 1180 | 290 | 290 | 170 | 69 | 3 | 68 | 2 | | | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** LOUISIANA

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** LOWER MISSISSIPPI-YAZOO RIVERS

**STATION LOCATION** MISSISSIPPI RIVER AT
DELTA, LOUISIANA 054

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES PROTOZOA (Identifiable) Number per ml. | ROTIFERS NUMBER PER LITER | ROTIFERS GENERA AND COUNT LEVEL (See text for Codes) 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | CRUSTACEA NUMBER PER LITER | CRUSTACEA GENERA AND COUNT LEVEL (See text for Codes) 1ST | | 2ND | | 3RD | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 11 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 24 | 61 | 56 | 36 | 58 | 21 | 92 | 20 | 83 | 8 | 15 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 16 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 29 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 12 | 61 | 56 | 58 | 92 | 10 | 83 | 10 | 89 | 5 | 17 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 28 | 61 | 83 | 23 | 56 | 14 | 80 | 8 | 92 | 5 | 50 | 110 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 80 | 34 | 56 | 21 | 89 | 6 | 47 | 6 | 33 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 30 | 62 | | | | | | | | | | 90 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 13 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 27 | 62 | 83 | 26 | 92 | 12 | 62 | 6 | 26 | 6 | 50 | 80 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 12 | 62 | 56 | 25 | 92 | 22 | 26 | 5 | 62 | 5 | 43 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 27 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 10 | 62 | 92 | 18 | 56 | 12 | 62 | 12 | 80 | 5 | 53 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 9 | 62 | 80 | 60 | 92 | 12 | 56 | 8 | 82 | 6 | 14 | 0 | 0 | 9 | 11 | 1 | | | | | | | | | 6 | 50 | 1 | | | | | 0 | 0 |
| 5 | 22 | 62 | 80 | 31 | 56 | 28 | 92 | 10 | 82 | 7 | 24 | 0 | 0 | 7 | 2 | 1 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 6 | 5 | 62 | 56 | 51 | 80 | 21 | 58 | 12 | 92 | 7 | 9 | 0 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 19 | 62 | 92 | 25 | 80 | 19 | 56 | 14 | 71 | 8 | 34 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 11 | 62 | 26 | 45 | 20 | 13 | 58 | 7 | 56 | 6 | 29 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 24 | 62 | 20 | 24 | 56 | 17 | 58 | 16 | 26 | 14 | 29 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 8 | 62 | 58 | 13 | 26 | 9 | 47 | 9 | 56 | 8 | 61 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 27 | 62 | 20 | 44 | 56 | 19 | 58 | 16 | 92 | 4 | 17 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 5 | 62 | 20 | 37 | 56 | 19 | 58 | 16 | 26 | 11 | 17 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 19 | 62 | 58 | 30 | 26 | 21 | 56 | 18 | 92 | 5 | 26 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Vicksburg, Mississippi
Operated by U.S. Geological Survey

MAJOR BASIN Southwest-Lower Mississippi River

MINOR BASIN Lower Mississippi-Yazoo Rivers

STATION LOCATION Mississippi River at
Delta, Louisiana

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 470.000 | 286.000 | 694.000 | 906.000 | 950.000 | 838.000 | 1418.000 | 1225.000 | 393.000 | 420.000 | 406.000 | 223.000 |
| 2 | 461.000 | 282.000 | 668.000 | 884.000 | 978.000 | 870.000 | 1434.000 | 1192.000 | 403.000 | 412.000 | 413.000 | 226.000 |
| 3 | 467.000 | 276.000 | 636.000 | 865.000 | 1014.000 | 926.000 | 1436.000 | 1158.000 | 416.000 | 404.000 | 408.000 | 226.000 |
| 4 | 473.000 | 269.000 | 601.000 | 840.000 | 1046.000 | 994.000 | 1430.000 | 1128.000 | 428.000 | 397.000 | 396.000 | 224.000 |
| 5 | 470.000 | 265.000 | 577.000 | 800.000 | 1076.000 | 1055.000 | 1414.000 | 1088.000 | 435.000 | 388.000 | 384.000 | 227.000 |
| 6 | 460.000 | 261.000 | 559.000 | 740.000 | 1093.000 | 1080.000 | 1408.000 | 1042.000 | 444.000 | 382.000 | 373.000 | 232.000 |
| 7 | 439.000 | 269.000 | 542.000 | 680.000 | 1107.000 | 1100.000 | 1410.000 | 990.000 | 460.000 | 370.000 | 360.000 | 238.000 |
| 8 | 419.000 | 294.000 | 525.000 | 632.000 | 1116.000 | 1175.000 | 1414.000 | 950.000 | 508.000 | 356.000 | 348.000 | 243.000 |
| 9 | 404.000 | 364.000 | 513.000 | 604.000 | 1122.000 | 1232.000 | 1420.000 | 900.000 | 545.000 | 340.000 | 336.000 | 249.000 |
| 10 | 397.000 | 441.000 | 504.000 | 578.000 | 1124.000 | 1268.000 | 1421.000 | 858.000 | 560.000 | 332.000 | 324.000 | 254.000 |
| 11 | 393.000 | 510.000 | 490.000 | 560.000 | 1118.000 | 1296.000 | 1422.000 | 822.000 | 566.000 | 350.000 | 315.000 | 258.000 |
| 12 | 394.000 | 561.000 | 488.000 | 566.000 | 1108.000 | 1318.000 | 1418.000 | 788.000 | 562.000 | 374.000 | 304.000 | 264.000 |
| 13 | 389.000 | 599.000 | 498.000 | 588.000 | 1094.000 | 1338.000 | 1412.000 | 756.000 | 545.000 | 390.000 | 298.000 | 270.000 |
| 14 | 377.000 | 611.000 | 520.000 | 618.000 | 1074.000 | 1350.000 | 1398.000 | 730.000 | 570.000 | 396.000 | 286.000 | 274.000 |
| 15 | 360.000 | 592.000 | 551.000 | 636.000 | 1052.000 | 1358.000 | 1380.000 | 696.000 | 594.000 | 392.000 | 286.000 | 279.000 |
| 16 | 340.000 | 565.000 | 587.000 | 653.000 | 1027.000 | 1365.000 | 1368.000 | 660.000 | 610.000 | 386.000 | 300.000 | 280.000 |
| 17 | 327.000 | 535.000 | 630.000 | 667.000 | 1000.000 | 1372.000 | 1356.000 | 615.000 | 622.000 | 380.000 | 293.000 | 281.000 |
| 18 | 311.000 | 512.000 | 678.000 | 682.000 | 972.000 | 1378.000 | 1347.000 | 592.000 | 628.000 | 376.000 | 280.000 | 288.000 |
| 19 | 322.000 | 489.000 | 712.000 | 696.000 | 942.000 | 1386.000 | 1338.000 | 585.000 | 626.000 | 372.000 | 264.000 | 292.000 |
| 20 | 336.000 | 468.000 | 734.000 | 708.000 | 920.000 | 1395.000 | 1332.000 | 576.000 | 622.000 | 367.000 | 254.000 | 314.000 |
| 21 | 342.000 | 456.000 | 750.000 | 724.000 | 894.000 | 1402.000 | 1326.000 | 570.000 | 610.000 | 364.000 | 247.000 | 314.000 |
| 22 | 354.000 | 452.000 | 766.000 | 734.000 | 868.000 | 1407.000 | 1322.000 | 558.000 | 594.000 | 370.000 | 241.000 | 312.000 |
| 23 | 365.000 | 468.000 | 794.000 | 736.000 | 840.000 | 1412.000 | 1316.000 | 540.000 | 580.000 | 384.000 | 238.000 | 314.000 |
| 24 | 367.000 | 503.000 | 821.000 | 736.000 | 820.000 | 1411.000 | 1312.000 | 510.000 | 562.000 | 396.000 | 234.000 | 322.000 |
| 25 | 361.000 | 561.000 | 847.000 | 738.000 | 810.000 | 1400.000 | 1307.000 | 480.000 | 542.000 | 407.000 | 230.000 | 330.000 |
| 26 | 348.000 | 633.000 | 868.000 | 760.000 | 808.000 | 1375.000 | 1301.000 | 458.000 | 514.000 | 406.000 | 227.000 | 326.000 |
| 27 | 333.000 | 685.000 | 891.000 | 792.000 | 808.000 | 1362.000 | 1296.000 | 442.000 | 486.000 | 400.000 | 223.000 | 322.000 |
| 28 | 317.000 | 718.000 | 901.000 | 825.000 | 818.000 | 1358.000 | 1286.000 | 428.000 | 462.000 | 390.000 | 220.000 | 316.000 |
| 29 | 305.000 | 731.000 | 914.000 | 865.000 |  | 1358.000 | 1278.000 | 412.000 | 445.000 | 380.000 | 218.000 | 304.000 |
| 30 | 297.000 | 713.000 | 919.000 | 896.000 |  | 1375.000 | 1252.000 | 394.000 | 432.000 | 372.000 | 217.000 | 296.000 |
| 31 | 292.000 |  | 923.000 | 924.000 |  | 1400.000 |  | 390.000 |  | 374.000 | 220.000 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** ARKANSAS
**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER
**MINOR BASIN** LOWER MISSISSIPPI-CAIRO TO HELENA
**STATION LOCATION** MISSISSIPPI RIVER AT
WEST MEMPHIS, ARKANSAS 22

| DATE SAMPLE TAKEN | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 2 | 61 | 10 | 11 | - | - | - | - | - | - | 29 | 12 | 9 | 8 | 38 | 14 | | | | | | |
| 9 | 61 | 10 | 30 | - | - | - | - | - | - | 9 | 9 | 14 | 7 | 23 | 11 | | | | | | |
| 16 | 61 | 10 | 26 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 4 | 17 | 6 | 23 | 7 | | | | | | |
| 23 | 61 | 11 | 1 | - | - | - | - | - | - | 44 | 12 | 14 | 7 | 58 | 14 | | | | | | |
| 30 | 61 | 11 | 10 | - | - | - | - | - | - | 15 | 8 | 17 | 7 | 32 | 11 | | | | | | |
| 6 | 61 | 11 | 17 | - | - | - | - | - | - | 31 | 7 | 33 | 6 | 64 | 9 | | | | | | |
| 13 | 61 | 11 | 28 | - | - | - | - | - | - | 85 | 10 | 36 | 6 | 121 | 12 | | | | | | |
| 20 | 61 | 12 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 48 | 7 | 30 | 6 | 78 | 9 | | | | | | |
| 27 | 61 | 12 | 12 | - | - | - | - | - | - | 72 | 11 | 24 | 7 | 96 | 13 | | | | | | |
| 4 | 61 | 12 | 14 | - | - | - | - | - | - | 37 | 10 | 28 | 8 | 65 | 13 | | | | | | |
| 11 | 61 | 12 | 19 | - | - | - | - | - | - | 78 | 9 | 34 | 8 | 112 | 12 | | | | | | |
| 18 | 61 | 12 | 27 | 6 | 3 | 1 | 1 | 7 | 3 | 80 | 9 | 32 | 6 | 112 | 11 | | | | | | |
| 26 | 61 | 1 | 5 | - | - | - | - | - | - | 25 | 6 | 31 | 6 | 56 | 8 | | | | | | |
| 8 | 62 | 1 | 25 | - | - | - | - | - | - | 18 | 7 | 27 | 7 | 45 | 10 | | | | | | |
| 15 | 62 | 1 | 25 | 3 | 2 | 0 | 1 | 3 | 2 | 77 | 8 | 37 | 6 | 114 | 10 | | | | | | |
| 22 | 62 | 2 | 2 | - | - | - | - | - | - | 63 | 8 | 36 | 7 | 99 | 11 | | | | | | |
| 29 | 62 | 2 | 9 | - | - | - | - | - | - | 68 | 9 | 35 | 7 | 103 | 11 | | | | | | |
| 5 | 62 | 2 | 14 | - | - | - | - | - | - | 45 | 9 | 26 | 7 | 71 | 11 | | | | | | |
| 12 | 62 | 2 | 23 | - | - | - | - | - | - | 42 | 7 | 34 | 6 | 76 | 9 | | | | | | |
| 19 | 62 | 3 | 5 | 4 | 4 | 1 | 1 | 5 | 4 | 71 | 13 | 32 | 6 | 103 | 14 | | | | | | |
| 26 | 62 | 3 | 12 | - | - | - | - | - | - | 62 | 10 | 29 | 7 | 91 | 12 | | | | | | |
| 5 | 62 | 6 | 8 | - | - | - | - | - | - | 84 | 11 | 25 | 9 | 109 | 14 | | | | | | |
| 14 | 62 | 6 | 26 | - | - | - | - | - | - | 17 | 7 | 25 | 8 | 42 | 11 | | | | | | |
| 21 | 62 | 6 | 26 | 3 | 2 | 1 | 1 | 4 | 2 | 28 | 9 | 23 | 7 | 51 | 11 | | | | | | |
| 28 | 62 | 6 | 29 | - | - | - | - | - | - | 16 | 6 | 22 | 7 | 38 | 9 | | | | | | |
| 4 | 62 | 7 | 5 | - | - | - | - | - | - | 27 | 14 | 35 | 9 | 62 | 17 | | | | | | |
| 18 | 62 | 7 | 20 | 2 | 7 | 0 | 1 | 2 | 7 | 100 | 56 | 30 | 7 | 130 | 56 | | | | | | |
| 25 | 62 | 8 | 14 | - | - | - | - | - | - | 85 | 62 | 33 | 8 | 118 | 63 | | | | | | |
| 2 | 62 | 7 | 31 | - | - | - | - | - | - | 51 | 65 | 2 | 6 | 53 | 65 | | | | | | |
| 9 | 62 | 8 | 6 | - | - | - | - | - | - | 22 | 5 | 27 | 6 | 49 | 7 | | | | | | |
| 16 | 62 | 8 | 8 | 6 | 3 | 0 | 1 | 6 | 3 | 38 | 12 | 41 | 10 | 79 | 16 | | | | | | |
| 23 | 62 | 8 | 9 | - | - | - | - | - | - | 10 | 7 | 30 | 8 | 40 | 11 | | | | | | |
| 30 | 62 | 8 | 17 | - | - | - | - | - | - | 46 | 11 | 34 | 8 | 80 | 14 | | | | | | |
| 6 | 62 | 8 | 28 | - | - | - | - | - | - | 48 | 10 | 27 | 8 | 75 | 13 | | | | | | |
| 13 | 62 | 8 | 3 | 0 | 3 | 1 | 1 | 1 | 3 | 33 | 32 | 26 | 8 | 59 | 33 | | | | | | |
| 20 | 62 | 9 | 6 | - | - | - | - | - | - | 13 | 7 | 29 | 8 | 42 | 11 | | | | | | |
| 27 | 62 | 9 | 17 | - | - | - | - | - | - | 8 | 6 | 15 | 8 | 23 | 10 | | | | | | |
| 4 | 62 | 10 | 6 | - | - | - | - | - | - | 3 | 6 | 19 | 8 | 22 | 10 | | | | | | |
| 10 | 62 | 10 | 9 | - | - | - | - | - | - | 11 | 6 | 23 | 8 | 34 | 10 | | | | | | |
| 17 | 62 | 10 | 15 | 3 | 3 | 1 | 1 | 4 | 3 | 56 | 30 | 21 | 8 | 77 | 31 | | | | | | |
| 24 | 62 | 10 | 15 | - | - | - | - | - | - | 20 | 8 | 31 | 8 | 51 | 11 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

| | |
|---|---|
| **STATE** | ARKANSAS |
| **MAJOR BASIN** | SOUTHWEST-LOWER MISSISSIPPI RIVER |
| **MINOR BASIN** | LOWER MISSISSIPPI-CAIRO TO HELENA |
| **STATION LOCATION** | MISSISSIPPI RIVER AT<br>WEST MEMPHIS, ARKANSAS 22 |

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 800 | 0 | 20 | 150 | 0 | 40 | 0 | 480 | 170 | 40 | 80 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 1600 | 0 | 60 | 310 | 0 | 40 | 40 | 890 | 210 | 210 | 120 | 69 | 2 | 68 | 2 | 71 | 1 | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 1700 | 0 | 20 | 370 | 0 | 190 | 0 | 1040 | 100 | 370 | 60 | 71 | 3 | 69 | 2 | 38 | 1 | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 1700 | 0 | 0 | 130 | 0 | 100 | 0 | 1240 | 270 | 350 | 210 | 71 | 3 | 69 | 1 | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 1800 | 0 | 0 | 120 | 0 | 80 | 20 | 1160 | 410 | 150 | 100 | 69 | 3 | 92 | 2 | 71 | 1 | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 1400 | 0 | 0 | 110 | 0 | 200 | 0 | 940 | 130 | 940 | 250 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 1700 | 0 | 0 | 40 | 0 | 0 | 0 | 1160 | 480 | 80 | 210 | 69 | 2 | 92 | 2 | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 1300 | 0 | 0 | 0 | 0 | 40 | 0 | 930 | 370 | 170 | 100 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 800 | 0 | 0 | 0 | 0 | 20 | 0 | 440 | 330 | 60 | 100 | 69 | 1 | 71 | 1 | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 600 | 0 | 0 | 0 | 0 | 0 | 0 | 290 | 340 | 70 | 20 | 69 | 1 | 84 | 1 | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 10800 | 0 | 0 | 150 | 630 | 80 | 0 | 4220 | 5700 | 3000 | 2410 | 71 | 5 | 92 | 3 | 50 | 3 | 88 | 2 | 69 | 1 | | | | | | | | | | |
| 5 | 21 | 62 | 2800 | 40 | 0 | 400 | 310 | 20 | 0 | 1180 | 900 | 190 | 60 | 71 | 3 | 88 | 2 | 50 | 2 | 69 | 1 | 92 | 1 | | | | | | | | | | |
| 6 | 4 | 62 | 2200 | 20 | 0 | 210 | 40 | 40 | 0 | 1180 | 730 | 410 | 80 | 71 | 3 | 92 | 2 | 69 | 2 | 38 | 1 | | | | | | | | | | | | |
| 6 | 18 | 62 | 1400 | 0 | 0 | 0 | 0 | 100 | 0 | 990 | 310 | 270 | 60 | 71 | 2 | 69 | 2 | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 1500 | 0 | 0 | 130 | 150 | 20 | 0 | 630 | 590 | 760 | 380 | 71 | 1 | 69 | 1 | 88 | 1 | 92 | 1 | | | | | | | | | | | | |
| 7 | 16 | 62 | 1500 | 0 | 0 | 80 | 0 | 270 | 0 | 750 | 370 | 250 | 40 | 69 | 1 | 68 | 1 | 57 | 1 | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 1500 | 0 | 0 | 0 | 0 | 40 | 60 | 840 | 550 | 550 | 380 | 68 | 2 | 69 | 1 | 71 | 1 | 88 | 1 | | | | | | | | | | | | |
| 8 | 20 | 62 | 1100 | 0 | 0 | 210 | 0 | 20 | 0 | 660 | 250 | 80 | 0 | 69 | 1 | 67 | 1 | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 2600 | 40 | 0 | 290 | 0 | 120 | 0 | 1410 | 790 | 170 | 80 | 69 | 3 | 92 | 2 | 68 | 2 | 67 | 1 | | | | | | | | | | | | |
| 9 | 17 | 62 | 600 | 0 | 30 | 170 | 0 | 10 | 0 | 220 | 190 | 420 | 210 | | | | | | | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** ARKANSAS

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** LOWER MISSISSIPPI-CAIRO TO HELENA

**STATION LOCATION** MISSISSIPPI RIVER AT

WEST MEMPHIS, ARKANSAS 022

| DATE OF AMPLE: DAY | YEAR | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes): 1ST SPECIES | 1ST PERCENT | 2ND SPECIES | 2ND PERCENT | 3RD SPECIES | 3RD PERCENT | 4TH SPECIES | 4TH PERCENT | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES: PROTOZOA (Identifiable) Number per ml. | ROTIFERS: NUMBER PER LITER | ROTIFERS GENERA AND COUNT LEVEL (See text for Codes): 1ST GENUS | 1ST COUNT LEVEL | 2ND GENUS | 2ND COUNT LEVEL | 3RD GENUS | 3RD COUNT LEVEL | 4TH GENUS | 4TH COUNT LEVEL | 5TH GENUS | 5TH COUNT LEVEL | CRUSTACEA: NUMBER PER LITER | CRUSTACEA GENERA AND COUNT LEVEL (See text for Codes): 1ST GENUS | 1ST COUNT LEVEL | 2ND GENUS | 2ND COUNT LEVEL | 3RD GENUS | 3RD COUNT LEVEL | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 61 | 56 | 36 | 58 | 33 | 26 | 4 | 18 | 4 | 23 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 16 | 61 | 56 | 42 | 58 | 27 | 92 | 10 | 26 | 8 | 13 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 61 | 83 | 34 | 56 | 31 | 58 | 12 | 80 | 7 | 16 | 9850 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 20 | 61 | 83 | 51 | 56 | 30 | 92 | 4 | 58 | 3 | 12 | 20 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 61 | 56 | 40 | 83 | 10 | 80 | 3 | 58 | 3 | 44 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 18 | 61 | 56 | 57 | 80 | 12 | 89 | 6 | 82 | 3 | 22 | 20 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 62 | 89 | 26 | 92 | 16 | 56 | 11 | 80 | 5 | 42 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 15 | 62 | 56 | 17 | 80 | 12 | 92 | 9 | 36 | 6 | 56 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 62 | 56 | 17 | 92 | 11 | 83 | 11 | 62 | 6 | 55 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 19 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 62 | 80 | 35 | 82 | 16 | 92 | 7 | 56 | 6 | 36 | 0 | 0 | 7 | | | | | | | | | | | 7 | 50 | 1 | | | | | 0 | 0 |
| 21 | 62 | 80 | 30 | 56 | 22 | 82 | 19 | 58 | 9 | 20 | 0 | 0 | 2 | | | | | | | | | | | 10 | 76 | 2 | 50 | 1 | | | 0 | 0 |
| 4 | 62 | 56 | 36 | 83 | 19 | 80 | 15 | 92 | 12 | 18 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 18 | 62 | 80 | 19 | 83 | 19 | 56 | 18 | 71 | 10 | 34 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 62 | 83 | 16 | 80 | 10 | 92 | 8 | 71 | 8 | 58 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 16 | 62 | 56 | 23 | 26 | 20 | 58 | 10 | 20 | 7 | 40 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 62 | 26 | 18 | 58 | 13 | 80 | 12 | 56 | 11 | 46 | 80 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 20 | 62 | 56 | 30 | 58 | 17 | 20 | 16 | 26 | 13 | 24 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 62 | 58 | 38 | 56 | 31 | 26 | 8 | 20 | 6 | 17 | 0 | 0 | 63 | 11 | 3 | 17 | 3 | 22 | 2 | | | | | 57 | 50 | 5 | 77 | 2 | | | 0 | 0 |
| 17 | 62 | 26 | 21 | 56 | 17 | 58 | 14 | 92 | 7 | 41 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** ARKANSAS

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVE

**MINOR BASIN** LOWER MISSISSIPPI-CAIRO TO HELEN

**STATION LOCATION** MISSISSIPPI RIVER AT
WEST MEMPHIS, ARKANSAS

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LO |
| 10 | 12 | 61 | 10 | 23 | 4780 | 112 | 35 | 77 | 1 | 8 | 14 | 2 | 1 | 10 | 1 | 5 | 2 | 1 | |
| 5 | 10 | 62 | 5 | 21 | 5050 | 111 | 46 | 65 | 1 | 12 | 15 | 2 | 1 | 12 | 0 | 5 | 4 | 1 | |
| 6 | 7 | 62 | 6 | 18 | 2860 | 129 | 45 | 84 | 1 | 12 | 14 | 2 | 2 | 10 | 0 | 5 | 4 | 1 | |
| 7 | 31 | 62 | 8 | 6 | 3150 | 109 | 41 | 68 | 1 | 12 | 15 | 2 | 1 | 12 | 0 | 5 | 3 | 1 | |
| 8 | 20 | 62 | 8 | 27 | 2150 | 122 | 42 | 80 | 0 | 10 | 18 | 3 | 1 | 14 | 0 | 5 | 1 | 1 | |

STATION LOCATION MISSISSIPPI RIVER AT

WEST MEMPHIS, ARKANSAS

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 0 | 2 | 61 | 19.1 | 7.2 | 7.8 | .7 | 30 | 2.8 | 8.3 | .1 | 8 | 106 | 154 | 18 | 550 | 43 | .2 | 210 | 23000 |
| 0 | 9 | 61 | 19.2 | 7.6 | 7.9 | .7 | 19 | 1.9 | 7.6 | .0 | 12 | 100 | 142 | 16 | 260 | 43 | .2 | 216 | 50000 |
| 0 | 16 | 61 | 18.4 | 7.8 | 7.9 | 2.0 | 15 | 2.6 | 6.4 | .1 | 12 | 120 | 168 | 17 | 270 | 50 | - | - | 65000 |
| 0 | 23 | 61 | 16.2 | 7.8 | 8.0 | .9 | 36 | 3.0 | 9.8 | .1 | 13 | 122 | 166 | 17 | 700 | 50 | .2 | 248 | 15000 |
| 0 | 30 | 61 | 16.4 | 8.5 | 8.0 | 1.1 | 19 | 2.5 | 9.3 | .4 | 15 | 124 | 172 | 18 | 180 | 47 | .2 | 272 | 43000 |
| 1 | 6 | 61 | 13.5 | 9.1 | 8.1 | 1.0 | 14 | 2.9 | 9.3 | .2 | 17 | 136 | 194 | 11 | 160 | 53 | .1 | 278 | 23000 |
| 1 | 13 | 61 | 11.9 | 7.5 | 7.9 | - | 26 | 2.9 | 10.5 | .3 | 13 | 106 | 148 | 21 | 900 | 47 | .3 | 214 | - |
| 1 | 20 | 61 | 10.0 | 9.6 | 8.0 | 1.4 | 23 | 3.0 | 9.8 | .2 | 16 | 114 | 168 | 19 | 200 | 48 | .1 | 234 | 8000 |
| 1 | 27 | 61 | 8.7 | 9.8 | 8.0 | 1.8 | 38 | 3.9 | 11.2 | .2 | 13 | 96 | 144 | 17 | 600 | 39 | .2 | 202 | 22000 |
| 2 | 4 | 61 | 8.9 | 10.0 | 7.8 | 1.0 | 24 | 4.9 | 12.3 | .2 | 18 | 106 | 166 | 17 | 200 | 53 | .2 | 246 | 60000 |
| 2 | 11 | 61 | 7.5 | 10.2 | 8.0 | 1.5 | 20 | 4.1 | 10.3 | .3 | 22 | 122 | 172 | 13 | 175 | 59 | .3 | 292 | 23000 |
| 2 | 18 | 61 | 6.6 | 11.5 | 7.9 | 1.7 | 18 | 3.1 | 9.7 | .2 | 18 | 90 | 134 | 12 | 150 | 45 | .2 | 212 | 29000 |
| 2 | 26 | 61 | 7.2 | 10.4 | 7.9 | 1.1 | 27 | 2.7 | 7.3 | .4 | 16 | 76 | 112 | 16 | 170 | 40 | .1 | 196 | 12000 |
| 1 | 2 | 62 | 3.8 | 12.2 | 8.0 | 1.9 | 29 | 2.8 | 8.0 | .2 | 13 | 86 | 118 | 14 | 170 | 34 | .0 | 196 | - |
| 1 | 8 | 62 | 3.8 | 12.4 | 8.1 | 1.6 | 19 | 3.3 | 7.9 | .3 | 11 | 96 | 106 | 14 | 100 | 36 | .0 | 202 | 11000 |
| 1 | 15 | 62 | 1.6 | 13.8 | 8.1 | 2.5 | 19 | 3.1 | 7.9 | .0 | 15 | 94 | 126 | 10 | 140 | 34 | .1 | 200 | 6600 |
| 1 | 22 | 62 | 2.8 | 12.7 | 7.9 | 4.6 | 22 | 4.0 | 9.0 | .3 | 12 | 76 | 108 | 15 | 210 | 32 | .0 | 180 | 14000 |
| 1 | 29 | 62 | 3.1 | 12.4 | 7.8 | 3.7 | 22 | - | - | .5 | 10 | 78 | 106 | 14 | 280 | 28 | .1 | 168 | 37000 |
| 2 | 5 | 62 | 5.8 | 11.9 | 7.9 | 2.4 | 26 | 4.1 | 9.8 | .4 | 10 | 76 | 100 | 15 | 230 | 32 | .1 | 160 | 4100 |
| 2 | 12 | 62 | 5.0 | 11.6 | 7.9 | 1.6 | 23 | 4.5 | 11.4 | .4 | 11 | 84 | 120 | 16 | 250 | 40 | .0 | 180 | 12000 |
| 2 | 19 | 62 | 6.4 | 11.0 | 7.8 | 2.0 | 21 | 3.8 | 10.8 | .4 | 11 | 90 | 138 | 17 | 190 | 45 | .0 | 196 | 6200 |
| 2 | 26 | 62 | 6.0 | 11.3 | 7.9 | 1.4 | 22 | 3.9 | 10.0 | - | 8 | 90 | 112 | 8 | 250 | 35 | .0 | 174 | 12000 |
| 5 | 7 | 62 | 19.9 | - | 7.8 | - | 52 | 2.4 | 5.7 | .2 | 10 | 93 | 140 | 14 | 140 | 36 | .0 | 226 | 31000 |
| 5 | 14 | 62 | 23.5 | 5.6 | 7.9 | .4 | 19 | 3.6 | 10.5 | .1 | 10 | 102 | 154 | 12 | 95 | 37 | .0 | 224 | 13000 |
| 5 | 21 | 62 | 24.6 | 6.1 | 7.8 | .5 | 19 | 2.8 | 8.6 | .0 | 10 | 112 | 168 | 13 | 210 | 46 | .0 | 244 | 39000 |
| 5 | 28 | 62 | 25.9 | 6.6 | 7.9 | .7 | 13 | 2.1 | 6.9 | .1 | 12 | 128 | 188 | 13 | 100 | 54 | .1 | 278 | 36000 |
| 6 | 4 | 62 | 25.0 | 6.6 | 7.9 | .9 | 17 | 2.7 | 8.6 | .2 | 14 | 126 | 190 | 12 | 200 | 61 | .1 | 284 | 52000 |
| 6 | 11 | 62 | 25.0 | 5.8 | 7.8 | .4 | 54 | 3.1 | 9.0 | .2 | 10 | 100 | 144 | 21 | 1300 | 36 | .0 | 214 | 48000 |
| 6 | 18 | 62 | 25.7 | 5.9 | 7.9 | .7 | 31 | 2.7 | 8.6 | .2 | 9 | 108 | 156 | 21 | 700 | 36 | .2 | 222 | 50000 |
| 6 | 25 | 62 | 26.4 | 6.1 | 7.9 | .5 | 35 | 2.7 | 8.4 | .1 | 10 | 106 | 148 | 22 | 650 | 29 | .1 | 224 | 41000 |
| 7 | 2 | 62 | 28.0 | 6.3 | 7.8 | .5 | 18 | 2.1 | 7.1 | .3 | 13 | 116 | 170 | 21 | 250 | 48 | .2 | 262 | 47000 |
| 7 | 9 | 62 | 29.4 | 6.1 | 7.9 | .6 | 21 | 3.8 | 10.7 | .0 | 12 | 111 | 164 | 22 | 310 | 46 | .1 | 266 | 44000 |
| 7 | 16 | 62 | 29.8 | 6.0 | 7.8 | .7 | 15 | 2.4 | 8.0 | .2 | 15 | 104 | 162 | 19 | 270 | 57 | .0 | 264 | 52000 |
| 7 | 23 | 62 | 30.2 | 6.0 | 7.9 | .5 | 17 | 2.6 | 8.2 | .1 | 15 | 106 | 170 | 15 | 240 | 64 | .1 | 280 | 35000 |
| 7 | 30 | 62 | 28.3 | 6.3 | 7.9 | .9 | 32 | 3.1 | 7.8 | .3 | 12 | 116 | 162 | 21 | 450 | 35 | .1 | 250 | 82000 |
| 8 | 6 | 62 | 27.8 | 6.4 | 7.9 | .4 | 26 | 3.0 | 8.1 | .2 | 11 | 122 | 170 | 17 | 410 | 47 | .1 | 270 | 72000 |
| 8 | 13 | 62 | 28.0 | 6.5 | 7.9 | .6 | 21 | 2.4 | 7.6 | .3 | 11 | 116 | 168 | 17 | 340 | 44 | .2 | 258 | 37000 |
| 8 | 20 | 62 | 27.7 | 6.8 | 7.9 | .9 | 15 | 2.8 | 8.4 | .2 | 13 | 136 | 184 | 17 | 160 | 45 | .1 | 282 | 12000 |
| 8 | 27 | 62 | 27.0 | 7.0 | 8.0 | .7 | 12 | 2.3 | 6.6 | .2 | 14 | 134 | 190 | 15 | 90 | 60 | .0 | 292 | 57000 |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** ARKANSAS

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** LOWER-MISSISSIPPI-CAIRO TO HELENA

**STATION LOCATION** MISSISSIPPI RIVER AT
WEST MEMPHIS, ARKANSAS 22

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 9 | 4 | 62 | 27.9 | 6.8 | 8.0 | .6 | 19 | 1.9 | 5.8 | .2 | 13 | 132 | 178 | 13 | 80 | 65 | .1 | 284 | 48000 |
| 9 | 10 | 62 | 25.0 | 7.1 | 8.1 | .6 | 15 | - | 5.1 | .3 | 13 | 120 | 172 | 13 | 130 | 65 | .1 | 267 | 25000 |
| 9 | 17 | 62 | 24.8 | - | 8.0 | - | 19 | 2.6 | 8.6 | .0 | 14 | 120 | 170 | 17 | 290 | 55 | .0 | 274 | - |
| 9 | 24 | 62 | 23.0 | 7.5 | 8.0 | .7 | 26 | 2.4 | 8.3 | .1 | 13 | 110 | 136 | 17 | 350 | 56 | .2 | 264 | 64000 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Memphis, Tennessee
Operated by U.S. Geological Survey

| | |
|---|---|
| STATE | Arkansas |
| MAJOR BASIN | Southwest-lower Mississippi River |
| MINOR BASIN | Lower Mississippi-Cairo to Helena |
| STATION LOCATION | Mississippi River at<br>West Memphis, Arkansas |

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 409.000 | 208.000 | 478.000 | 663.000 | 915.000 | 927.000 | 1256.000 | 775.000 | 365.000 | 331.000 | 345.000 | 178.000 |
| 2 | 389.000 | 206.000 | 458.000 | 573.000 | 931.000 | 1004.000 | 1251.000 | 733.000 | 377.000 | 324.000 | 322.000 | 188.000 |
| 3 | 363.000 | 215.000 | 445.000 | 503.000 | 947.000 | 1055.000 | 1251.000 | 704.000 | 385.000 | 310.000 | 304.000 | 195.000 |
| 4 | 340.000 | 224.000 | 434.000 | 456.000 | 955.000 | 1101.000 | 1247.000 | 688.000 | 406.000 | 297.000 | 295.000 | 197.000 |
| 5 | 319.000 | 254.000 | 421.000 | 424.000 | 967.000 | 1151.000 | 1251.000 | 672.000 | 447.000 | 286.000 | 284.000 | 199.000 |
| 6 | 306.000 | 319.000 | 401.000 | 401.000 | 963.000 | 1189.000 | 1251.000 | 660.000 | 484.000 | 275.000 | 273.000 | 208.000 |
| 7 | 315.000 | 382.000 | 377.000 | 385.000 | 959.000 | 1213.000 | 1247.000 | 645.000 | 500.000 | 271.000 | 267.000 | 222.000 |
| 8 | 331.000 | 440.000 | 335.000 | 373.000 | 955.000 | 1232.000 | 1242.000 | 624.000 | 498.000 | 286.000 | 258.000 | 232.000 |
| 9 | 342.000 | 484.000 | 313.000 | 394.000 | 947.000 | 1247.000 | 1237.000 | 597.000 | 489.000 | 317.000 | 248.000 | 238.000 |
| 10 | 335.000 | 503.000 | 315.000 | 453.000 | 931.000 | 1251.000 | 1223.000 | 570.000 | 486.000 | 340.000 | 244.000 | 238.000 |
| 11 | 317.000 | 514.000 | 326.000 | 512.000 | 907.000 | 1251.000 | 1213.000 | 543.000 | 503.000 | 345.000 | 248.000 | 238.000 |
| 12 | 308.000 | 509.000 | 368.000 | 540.000 | 877.000 | 1247.000 | 1208.000 | 517.000 | 512.000 | 333.000 | 248.000 | 242.000 |
| 13 | 295.000 | 478.000 | 421.000 | 558.000 | 843.000 | 1247.000 | 1194.000 | 492.000 | 512.000 | 324.000 | 242.000 | 244.000 |
| 14 | 273.000 | 432.000 | 475.000 | 558.000 | 806.000 | 1247.000 | 1179.000 | 470.000 | 514.000 | 317.000 | 236.000 | 244.000 |
| 15 | 252.000 | 397.000 | 509.000 | 561.000 | 768.000 | 1251.000 | 1179.000 | 458.000 | 528.000 | 315.000 | 224.000 | 248.000 |
| 16 | 244.000 | 373.000 | 537.000 | 561.000 | 736.000 | 1251.000 | 1170.000 | 464.000 | 540.000 | 315.000 | 217.000 | 262.000 |
| 17 | 240.000 | 354.000 | 570.000 | 579.000 | 704.000 | 1261.000 | 1170.000 | 470.000 | 546.000 | 313.000 | 209.000 | 277.000 |
| 18 | 258.000 | 342.000 | 579.000 | 600.000 | 675.000 | 1266.000 | 1175.000 | 464.000 | 552.000 | 315.000 | 199.000 | 273.000 |
| 19 | 297.000 | 340.000 | 594.000 | 606.000 | 657.000 | 1271.000 | 1175.000 | 453.000 | 552.000 | 326.000 | 192.000 | 258.000 |
| 20 | 319.000 | 352.000 | 624.000 | 594.000 | 645.000 | 1276.000 | 1170.000 | 440.000 | 540.000 | 342.000 | 190.000 | 248.000 |
| 21 | 322.000 | 382.000 | 660.000 | 573.000 | 639.000 | 1281.000 | 1165.000 | 419.000 | 517.000 | 373.000 | 188.000 | 248.000 |
| 22 | 306.000 | 445.000 | 698.000 | 561.000 | 639.000 | 1266.000 | 1156.000 | 392.000 | 481.000 | 392.000 | 183.000 | 250.000 |
| 23 | 286.000 | 517.000 | 730.000 | 558.000 | 639.000 | 1247.000 | 1151.000 | 375.000 | 442.000 | 377.000 | 178.000 | 244.000 |
| 24 | 269.000 | 552.000 | 752.000 | 567.000 | 636.000 | 1227.000 | 1137.000 | 365.000 | 416.000 | 356.000 | 176.000 | 228.000 |
| 25 | 256.000 | 576.000 | 772.000 | 600.000 | 639.000 | 1223.000 | 1124.000 | 354.000 | 401.000 | 349.000 | 173.000 | 215.000 |
| 26 | 248.000 | 585.000 | 792.000 | 654.000 | 691.000 | 1227.000 | 1096.000 | 345.000 | 382.000 | 342.000 | 171.000 | 208.000 |
| 27 | 246.000 | 582.000 | 816.000 | 711.000 | 768.000 | 1227.000 | 1047.000 | 349.000 | 368.000 | 335.000 | 171.000 | 202.000 |
| 28 | 246.000 | 561.000 | 826.000 | 765.000 | 847.000 | 1227.000 | 983.000 | 331.000 | 358.000 | 340.000 | 175.000 | 200.000 |
| 29 | 244.000 | 534.000 | 819.000 | 806.000 | | 1232.000 | 903.000 | 333.000 | 352.000 | 356.000 | 176.000 | 199.000 |
| 30 | 236.000 | 503.000 | 785.000 | 847.000 | | 1242.000 | 819.000 | 345.000 | 338.000 | 363.000 | 181.000 | 200.000 |
| 31 | 221.000 | | 736.000 | 884.000 | | 1256.000 | | 354.000 | | 358.000 | 176.000 | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | | | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 18 | 7 | 6 | 1 | 1 | 8 | 6 | 65 | 10 | 20 | 6 | 85 | 13 | | | | | | | | |
| 10 | 9 | 61 | 10 | 24 | - | - | - | - | - | - | 101 | 23 | 8 | 7 | 109 | 24 | | | | | | | | |
| 10 | 16 | 61 | 10 | 31 | - | - | - | - | - | - | 27 | 18 | 27 | 14 | 54 | 23 | | | | | | | | |
| 10 | 23 | 61 | 11 | 2 | - | - | - | - | - | - | 39 | 12 | 21 | 8 | 60 | 14 | | | | | | | | |
| 10 | 30 | 61 | 11 | 9 | - | - | - | - | - | - | 28 | 11 | 22 | 11 | 50 | 16 | | | | | | | | |
| 11 | 6 | 61 | 11 | 17 | 8 | 6 | 2 | 1 | 10 | 6 | 104 | 10 | 59 | 6 | 163 | 12 | | | | | | | | |
| 11 | 13 | 61 | 11 | 28 | - | - | - | - | - | - | 261 | 39 | 50 | 17 | 311 | 43 | | | | | | | | |
| 11 | 20 | 61 | 12 | 1 | - | - | - | - | - | - | 49 | 8 | 55 | 7 | 104 | 11 | | | | | | | | |
| 11 | 27 | 61 | 12 | 6 | - | - | - | - | - | - | 69 | 10 | 44 | 8 | 113 | 13 | | | | | | | | |
| 12 | 4 | 61 | 12 | 13 | 0 | 1 | 2 | 2 | 2 | 2 | 23 | 6 | 28 | 6 | 51 | 8 | | | | | | | | |
| 12 | 11 | 61 | 12 | 22 | - | - | - | - | - | - | 15 | 8 | 18 | 9 | 33 | 12 | | | | | | | | |
| 12 | 18 | 61 | 12 | 28 | - | - | - | - | - | - | 20 | 6 | 32 | 9 | 52 | 11 | | | | | | | | |
| 12 | 26 | 61 | 1 | 5 | - | - | - | - | - | - | 32 | 14 | 27 | 13 | 59 | 19 | | | | | | | | |
| 1 | 2 | 62 | 1 | 15 | 0 | 1 | 2 | 2 | 2 | 2 | 13 | 12 | 11 | 14 | 24 | 18 | | | | | | | | |
| 1 | 8 | 62 | 1 | 22 | - | - | - | - | - | - | 73 | 13 | 26 | 10 | 99 | 16 | | | | | | | | |
| 1 | 15 | 62 | 1 | 30 | - | - | - | - | - | - | 58 | 9 | 29 | 8 | 87 | 12 | | | | | | | | |
| 1 | 22 | 62 | 2 | 5 | - | - | - | - | - | - | 123 | 12 | 35 | 8 | 158 | 14 | | | | | | | | |
| 1 | 29 | 62 | 2 | 8 | - | - | - | - | - | - | 76 | 17 | 30 | 13 | 106 | 21 | | | | | | | | |
| 2 | 5 | 62 | 2 | 16 | 1 | 2 | 2 | 2 | 3 | 3 | 37 | 7 | 36 | 7 | 73 | 10 | | | | | | | | |
| 2 | 12 | 62 | 2 | 23 | - | - | - | - | - | - | 59 | 11 | 29 | 8 | 88 | 14 | | | | | | | | |
| 2 | 19 | 62 | 3 | 5 | - | - | - | - | - | - | 67 | 18 | 28 | 8 | 95 | 20 | | | | | | | | |
| 2 | 26 | 62 | 3 | 12 | - | - | - | - | - | - | 168 | 24 | 43 | 8 | 211 | 25 | | | | | | | | |
| 3 | 12 | 62 | 3 | 26 | 0 | 1 | 2 | 2 | 2 | 2 | 41 | 10 | 40 | 11 | 81 | 15 | | | | | | | | |
| 3 | 19 | 62 | 3 | 30 | - | - | - | - | - | - | 264 | 22 | 51 | 7 | 315 | 23 | | | | | | | | |
| 3 | 26 | 62 | 3 | 26 | - | - | - | - | - | - | 107 | 13 | 43 | 8 | 150 | 15 | | | | | | | | |
| 4 | 2 | 62 | 4 | 13 | 12 | 10 | 2 | 2 | 14 | 10 | 93 | 30 | 48 | 6 | 141 | 32 | | | | | | | | |
| 4 | 9 | 62 | 6 | 14 | - | - | - | - | - | - | 71 | 24 | 34 | 9 | 105 | 26 | | | | | | | | |
| 4 | 16 | 62 | 5 | 1 | - | - | - | - | - | - | 38 | 17 | 32 | 8 | 70 | 19 | | | | | | | | |
| 4 | 23 | 62 | 5 | 23 | - | - | - | - | - | - | 34 | 12 | 27 | 10 | 61 | 15 | | | | | | | | |
| 4 | 30 | 62 | 6 | 4 | - | - | - | - | - | - | 34 | 13 | 19 | 7 | 53 | 15 | | | | | | | | |
| 5 | 7 | 62 | 6 | 5 | 1 | 2 | 2 | 2 | 3 | 3 | 31 | 9 | 28 | 8 | 59 | 12 | | | | | | | | |
| 5 | 21 | 62 | 6 | 22 | - | - | - | - | - | - | 59 | 11 | 36 | 9 | 95 | 14 | | | | | | | | |
| 5 | 28 | 62 | 6 | 29 | - | - | - | - | - | - | 63 | 11 | 34 | 8 | 97 | 14 | | | | | | | | |
| 6 | 4 | 62 | 7 | 6 | 56 | 38 | 2 | 2 | 58 | 38 | 393 | 84 | 40 | 7 | 433 | 84 | | | | | | | | |
| 6 | 11 | 62 | 7 | 12 | - | - | - | - | - | - | 121 | 82 | 36 | 9 | 157 | 82 | | | | | | | | |
| 6 | 18 | 62 | 7 | 17 | - | - | - | - | - | - | 150 | 77 | 39 | 8 | 189 | 77 | | | | | | | | |
| 6 | 25 | 62 | 7 | 24 | - | - | - | - | - | - | 47 | 63 | 34 | 8 | 81 | 64 | | | | | | | | |
| 7 | 23 | 62 | 8 | 8 | 47 | 39 | 1 | 2 | 48 | 39 | 41 | 11 | 35 | 9 | 76 | 14 | | | | | | | | |
| 7 | 30 | 62 | 8 | 21 | - | - | - | - | - | - | 83 | 37 | 38 | 8 | 121 | 38 | | | | | | | | |
| 8 | 6 | 62 | 8 | 28 | 3 | 4 | 2 | 2 | 5 | 4 | 54 | 17 | 39 | 13 | 93 | 21 | | | | | | | | |
| 8 | 13 | 62 | 8 | 30 | - | - | - | - | - | - | 77 | 61 | 28 | 14 | 105 | 63 | | | | | | | | |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** UPPER MISSISSIPPI RIVER

**MINOR BASIN** MISSISSIPPI-CAPE GIRARDEAU AREA

**STATION LOCATION** MISSISSIPPI RIVER AT
CAPE GIRARDEAU, MISSOURI 23

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| O. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 8 | 20 | 62 | 9 | 5 | - | - | - | - | - | - | 27 | 14 | 37 | 15 | 64 | 21 | | | | | | |
| 8 | 27 | 62 | 9 | 25 | - | - | - | - | - | - | 24 | 17 | 26 | 17 | 50 | 24 | | | | | | |
| 9 | 4 | 62 | 9 | 19 | 1 | 2 | 2 | 2 | 3 | 3 | 13 | 13 | 29 | 13 | 42 | 18 | | | | | | |
| 9 | 10 | 62 | 10 | 9 | - | - | - | - | - | - | 67 | 65 | 33 | 14 | 100 | 66 | | | | | | |
| 9 | 17 | 62 | 10 | 9 | - | - | - | - | - | - | 46 | 73 | 18 | 10 | 64 | 74 | | | | | | |
| 9 | 24 | 62 | 10 | 16 | - | - | - | - | - | - | 21 | 15 | 18 | 13 | 39 | 20 | | | | | | |

# PLANKTON POPULATION

**STATE** MISSOURI
**MAJOR BASIN** UPPER MISSISSIPPI RIVER
**MINOR BASIN** MISSISSIPPI-CAPE GIRARDEAU AREA
**STATION LOCATION** MISSISSIPPI RIVER AT
CAPE GIRARDEAU, MISSOURI 23

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 300 | 0 | 0 | 20 | 0 | 0 | 0 | 250 | 0 | 160 | 250 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 1100 | 0 | 0 | 100 | 0 | 100 | 0 | 640 | 210 | 190 | 120 | 71 | 2 | 69 | 1 | 68 | 1 | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 1200 | 0 | 0 | 40 | 0 | 20 | 0 | 870 | 290 | 20 | 20 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 2100 | 0 | 100 | 20 | 0 | 40 | 0 | 1620 | 350 | 80 | 170 | 71 | 4 | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 1300 | 0 | 0 | 40 | 0 | 20 | 0 | 1040 | 190 | 290 | 100 | 71 | 3 | | | | | | | | | | | | | | | | | | |
| 12 | 11 | 61 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 8200 | 20 | 0 | 250 | 0 | 410 | 140 | 7020 | 340 | 1060 | 110 | 71 | 6 | 51 | 2 | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 2500 | 250 | 20 | 90 | 0 | 540 | 70 | 1190 | 320 | 180 | 180 | 71 | 3 | 51 | 2 | 2 | 1 | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 1000 | 0 | 20 | 40 | 0 | 20 | 0 | 350 | 520 | 20 | 80 | 71 | 2 | 88 | 1 | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 300 | 0 | 0 | 0 | 0 | 20 | 0 | 130 | 130 | 20 | 110 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 700 | 0 | 0 | 0 | 0 | 150 | 40 | 270 | 270 | 40 | 20 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 180 | 20 | 70 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 800 | 0 | 0 | 20 | 0 | 0 | 20 | 190 | 540 | 0 | 40 | 92 | 1 | 88 | 1 | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 600 | 0 | 0 | 70 | 0 | 20 | 50 | 200 | 250 | 380 | 180 | | | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 7500 | 0 | 20 | 560 | 430 | 460 | 80 | 4910 | 1010 | 1800 | 440 | 50 | 2 | 51 | 2 | 25 | 1 | 69 | 1 | | | | | | | | | | | | |
| 5 | 21 | 62 | 7600 | 0 | 80 | 480 | 80 | 150 | 0 | 5400 | 1370 | 4680 | 1100 | 71 | 5 | 69 | 2 | 68 | 2 | 38 | 1 | 92 | 1 | 88 | 1 | | | | | | | | |
| 6 | 4 | 62 | 1200 | 0 | 0 | 0 | 20 | 170 | 40 | 600 | 370 | 40 | 40 | 71 | 2 | 88 | 1 | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 700 | 0 | 0 | 20 | 0 | 0 | 0 | 410 | 230 | 0 | 0 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 2300 | 0 | 0 | 150 | 0 | 150 | 0 | 1010 | 970 | 510 | 510 | 69 | 2 | 67 | 2 | 92 | 2 | 88 | 1 | | | | | | | | | | | | |
| 7 | 16 | 62 | 900 | 0 | 0 | 0 | 0 | 210 | 0 | 330 | 330 | 120 | 170 | 57 | 1 | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 1700 | 0 | 20 | 40 | 0 | 330 | 0 | 700 | 580 | 290 | 80 | 68 | 1 | 69 | 1 | 71 | 1 | 51 | 1 | | | | | | | | | | | | |
| 8 | 20 | 62 | 2500 | 0 | 0 | 290 | 0 | 170 | 120 | 1350 | 540 | 540 | 170 | 69 | 2 | 71 | 2 | 68 | 1 | 67 | 1 | 35 | 1 | | | | | | | | | | |
| 9 | 4 | 62 | 9300 | 0 | 0 | 720 | 0 | 170 | 0 | 5570 | 2870 | 4220 | 1390 | 68 | 5 | 71 | 4 | 92 | 4 | 69 | 3 | 88 | 3 | 38 | 2 | 51 | 1 | | | | | | |
| 9 | 17 | 62 | 2500 | 0 | 80 | 170 | 0 | 230 | 0 | 1370 | 660 | 540 | 330 | 68 | 2 | 69 | 2 | 71 | 1 | 88 | 1 | 38 | 1 | | | | | | | | | | |

# PLANKTON POPULATION

**STATE** MISSOURI

**MAJOR BASIN** UPPER MISSISSIPPI RIVER

**MINOR BASIN** MISSISSIPPI-CAPE GIRARDEAU AREA

**STATION LOCATION** MISSISSIPPI RIVER AT

CAPE GIRARDEAU, MISSOURI 023

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | M I C R O I N V E R T E B R A T E S | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUM-BER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | NUM-BER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 58 | 28 | 56 | 21 | 26 | 11 | 18 | 7 | 33 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 56 | 35 | 58 | 30 | 26 | 9 | 83 | 9 | 17 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 83 | 43 | 56 | 32 | 58 | 8 | 92 | 3 | 14 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 83 | 37 | 56 | 32 | 80 | 8 | 71 | 3 | 20 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 83 | 71 | 56 | 13 | 80 | 6 | 92 | 3 | 7 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 11 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 80 | 87 | 83 | 5 | 95 | 2 | 56 | 1 | 5 | 180 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 71 | 27 | 36 | 9 | 92 | 8 | 83 | 7 | 49 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 71 | 31 | 92 | 13 | 83 | 10 | 46 | 7 | 39 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 71 | 23 | 80 | 17 | 83 | 14 | 92 | 7 | 39 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 92 | 13 | 48 | 12 | 86 | 7 | 36 | 6 | 62 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 56 | 34 | 71 | 15 | 92 | 12 | 83 | 9 | 30 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | | | | | | | | | | 80 | 0 | 2 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 80 | 40 | 56 | 28 | 58 | 5 | 92 | 5 | 22 | 40 | 0 | 33 | 11 | 3 | 2 | 1 | | | | | | | 19 | 50 | 3 | 76 | 2 | | | 0 | 0 |
| 6 | 4 | 62 | 80 | 21 | 71 | 18 | 92 | 8 | 86 | 6 | 47 | 0 | 0 | 1 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 83 | 30 | 56 | 15 | 80 | 9 | 71 | 7 | 39 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 7 | 2 | 62 | 18 | 61 | 80 | 15 | 92 | 4 | 56 | 3 | 17 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 26 | 21 | 58 | 18 | 20 | 14 | 56 | 9 | 38 | 40 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 58 | 31 | 56 | 28 | 26 | 10 | 80 | 6 | 25 | 0 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 56 | 31 | 26 | 14 | 20 | 11 | 82 | 9 | 35 | 0 | 0 | 17 | 11 | 1 | 2 | 1 | | | | | | | 6 | 76 | 2 | | | | | 0 | 0 |
| 9 | 4 | 62 | 26 | 19 | 56 | 19 | 58 | 19 | 92 | 12 | 31 | 0 | 0 | 15 | 11 | 1 | 17 | 1 | | | | | | | 7 | 76 | 2 | | | | | 3 | 0 |
| 9 | 17 | 62 | 26 | 21 | 58 | 19 | 56 | 18 | 82 | 5 | 37 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 10 | 5 | 61 | 10 | 16 | 3038 | 150 | 45 | 105 | 0 | 11 | 16 | 2 | 1 | 12 | 1 | 6 | 2 | 1 | 9 |
| 11 | 9 | 61 | 11 | 20 | 2453 | 303 | 66 | 237 | 1 | 15 | 30 | 2 | 2 | 22 | 4 | 9 | 3 | 2 | 6 |
| 12 | 8 | 61 | 12 | 18 | 2850 | 286 | 93 | 193 | 3 | 27 | 25 | 2 | 2 | 19 | 2 | 9 | 8 | 2 | 19 |
| 1 | 5 | 62 | 1 | 15 | 3533 | 286 | 82 | 204 | 2 | 15 | 32 | 2 | 3 | 25 | 2 | 12 | 5 | 1 | 15 |
| 2 | 8 | 62 | 2 | 19 | 2580 | 418 | 119 | 299 | 2 | 30 | 45 | 2 | 3 | 37 | 3 | 16 | 6 | 2 | 18 |
| 3 | 12 | 62 | 3 | 19 | 1875 | 486 | 135 | 351 | 3 | 34 | 43 | 2 | 3 | 35 | 3 | 19 | 11 | 3 | 22 |
| 4 | 4 | 62 | 4 | 16 | 3046 | 352 | 115 | 237 | 2 | 29 | 38 | 3 | 2 | 27 | 6 | 14 | 12 | 1 | 19 |
| 5 | 7 | 62 | 5 | 21 | 3375 | 242 | 128 | 114 | 8 | 35 | 31 | 2 | 1 | 26 | 2 | 15 | 14 | 1 | 24 |
| 7 | 2 | 62 | 7 | 16 | 2985 | 292 | 125 | 167 | 3 | 33 | 33 | 2 | 3 | 27 | 1 | 18 | 11 | 1 | 26 |
| 8 | 6 | 62 | 8 | 20 | 3517 | 237 | 102 | 135 | 2 | 22 | 34 | 3 | 2 | 27 | 2 | 19 | 8 | 2 | 15 |
| 9 | 6 | 62 | 9 | 17 | 2265 | 294 | 83 | 211 | 1 | 18 | 28 | 2 | 2 | 23 | 1 | 15 | 5 | 2 | 14 |

**STATION LOCATION** MISSISSIPPI RIVER AT

CAPE GIRARDEAU, MISSOURI 23

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 0 | 2 | 61 | 19.0 | - | 7.7 | - | - | - | - | - | 11 | 104 | 130 | 20 | 580 | 51 | .0 | - | - |
| 0 | 9 | 61 | 17.5 | - | 7.7 | - | 27 | - | - | - | 15 | 110 | 170 | - | 820 | - | - | - | - |
| 0 | 16 | 61 | 18.0 | - | 7.7 | - | - | - | - | - | 16 | 158 | 216 | 10 | 460 | 90 | .1 | 310 | - |
| 0 | 23 | 61 | 16.0 | - | 7.7 | - | - | - | - | - | 14 | 140 | 180 | - | 500 | 66 | .0 | 238 | - |
| 0 | 30 | 61 | 15.0 | - | 7.7 | - | - | - | - | - | 19 | 186 | 210 | 5 | 220 | 87 | .4 | 307 | - |
| 1 | 6 | 61 | 14.5 | - | 7.7 | - | - | - | - | - | 13 | 136 | 140 | 15 | 920 | 45 | .4 | 227 | - |
| 1 | 9 | 61 | - | - | - | - | - | - | - | - | - | - | - | 10 | - | 58 | .2 | 235 | - |
| 1 | 13 | 61 | 11.5 | - | 7.7 | - | - | - | - | - | 15 | 100 | 140 | - | 500 | - | - | - | - |
| 1 | 20 | 61 | 9.0 | - | 7.7 | - | - | - | - | - | 12 | 122 | 150 | 10 | 460 | 55 | .0 | 256 | - |
| 1 | 27 | 61 | 8.0 | - | 7.7 | - | - | - | - | - | 10 | 120 | 146 | 10 | 460 | 52 | .3 | - | - |
| 2 | 4 | 61 | 8.0 | - | 7.7 | - | - | - | - | - | 13 | 168 | 202 | 5 | 260 | 35 | .0 | - | - |
| 2 | 11 | 61 | 6.5 | - | 7.7 | - | 18 | - | - | - | 17 | 182 | 240 | 10 | 140 | 40 | .0 | 302 | - |
| 2 | 18 | 61 | 3.5 | - | 7.8 | - | - | - | - | - | 21 | 186 | 244 | - | 260 | - | - | - | - |
| 2 | 26 | 61 | 3.5 | - | 7.7 | - | - | - | - | - | 18 | 122 | 226 | - | 180 | - | - | - | - |
| 1 | 2 | 62 | 2.0 | - | 7.7 | - | - | - | - | - | 19 | 192 | 196 | - | 140 | - | - | - | - |
| 1 | 8 | 62 | 2.0 | - | 7.7 | - | 14 | - | - | - | 21 | 196 | 244 | 5 | 220 | 75 | .1 | 338 | - |
| 1 | 15 | 62 | 2.0 | - | 7.7 | - | - | - | - | - | 15 | 148 | 188 | - | 220 | 50 | - | - | - |
| 1 | 22 | 62 | 2.5 | - | 7.7 | - | - | - | - | - | 17 | 164 | 186 | - | 220 | 60 | .0 | - | - |
| 1 | 29 | 62 | 2.0 | - | 7.6 | - | - | - | - | - | 19 | 138 | 210 | 10 | 220 | 65 | .0 | 312 | - |
| 2 | 5 | 62 | 3.0 | - | 7.5 | - | - | - | - | - | 18 | 146 | 194 | - | 260 | 57 | .0 | - | - |
| 2 | 12 | 62 | 2.5 | - | 7.6 | - | 19 | - | - | - | 11 | 124 | 158 | - | 500 | 60 | .2 | - | - |
| 2 | 19 | 62 | 4.0 | - | 7.6 | - | - | - | - | - | 15 | 140 | 160 | 20 | 300 | 55 | .1 | - | - |
| 2 | 26 | 62 | 4.0 | - | 7.7 | - | - | - | - | - | 14 | 132 | 168 | 20 | 540 | 60 | .0 | - | - |
| 3 | 5 | 62 | 4.0 | - | 7.7 | - | - | - | - | - | 15 | 160 | 202 | - | 220 | - | - | - | - |
| 3 | 12 | 62 | 4.0 | - | 7.7 | - | - | - | - | - | 16 | 184 | 220 | - | 120 | - | - | - | - |
| 3 | 19 | 62 | 4.5 | - | 7.6 | - | - | - | - | - | 15 | 128 | 152 | - | 680 | - | - | - | - |
| 3 | 26 | 62 | 6.0 | - | 7.5 | - | - | - | - | - | 10 | 100 | 120 | - | 820 | - | - | - | - |
| 4 | 2 | 62 | 7.0 | - | 7.6 | - | - | - | - | - | 10 | 122 | 156 | - | 540 | - | - | 246 | - |
| 4 | 9 | 62 | 9.0 | - | 7.6 | - | 24 | - | - | - | 9 | 124 | 154 | - | 540 | 25 | .0 | - | - |
| 4 | 16 | 62 | 9.0 | - | 7.6 | - | - | - | - | - | 12 | 138 | 174 | 15 | 300 | 30 | .1 | 128 | - |
| 4 | 23 | 62 | 12.5 | - | 7.7 | - | - | - | - | - | 12 | 124 | 152 | 5 | 220 | 10 | .1 | 302 | - |
| 4 | 30 | 62 | 15.0 | - | 7.7 | - | - | - | - | - | 11 | 140 | 166 | 10 | 220 | 60 | - | 246 | - |
| 5 | 1 | 62 | - | - | - | - | - | - | - | - | - | - | - | 10 | - | 60 | .0 | 262 | - |
| 5 | 7 | 62 | 20.0 | - | 7.7 | - | - | - | - | - | 12 | 140 | 162 | - | 220 | - | - | - | - |
| 5 | 14 | 62 | 22.0 | - | 7.7 | - | - | - | - | - | 12 | 152 | 200 | - | 260 | - | - | - | - |
| 5 | 21 | 62 | 25.0 | - | 7.6 | - | - | - | - | - | 17 | 150 | 200 | 10 | 220 | 75 | .0 | - | - |
| 5 | 28 | 62 | 25.0 | - | 7.7 | - | - | - | - | - | 17 | 160 | 218 | 10 | 220 | 80 | .0 | 331 | - |
| 6 | 4 | 62 | 23.5 | - | 7.7 | - | - | - | - | - | 13 | 130 | 170 | - | 1840 | - | - | - | - |
| 6 | 11 | 62 | 24.0 | - | 7.7 | - | - | - | - | - | 12 | 108 | 162 | - | 960 | - | - | - | - |

**MINOR BASIN** MISSISSIPPI-CAPE GIRARDEAU AREA

**STATION LOCATION** MISSISSIPPI RIVER AT

CAPE GIRARDEAU, MISSOURI.

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 18 | 62 | 24.0 | - | 7.8 | - | - | - | - | - | 11 | 118 | 154 | - | 1260 | - | - | - | - |
| 6 | 25 | 62 | 24.0 | - | 7.7 | - | - | - | - | - | 13 | 124 | 178 | - | 460 | - | - | - | - |
| 7 | 2 | 62 | 28.0 | - | 7.8 | - | - | - | - | - | 16 | 152 | 166 | - | 580 | - | - | - | - |
| 7 | 9 | 62 | 29.0 | - | 7.7 | - | 36 | - | - | - | 15 | 134 | 180 | - | 500 | - | - | - | - |
| 7 | 16 | 62 | 30.0 | - | 7.7 | - | - | - | - | - | 14 | 160 | 196 | - | 380 | - | - | - | - |
| 7 | 23 | 62 | 30.0 | - | 7.7 | - | - | - | - | - | 17 | 138 | 178 | - | 500 | - | - | - | - |
| 7 | 30 | 62 | 26.5 | - | 7.7 | - | - | - | - | - | 17 | 154 | 182 | 10 | 640 | 65 | .2 | 320 | - |
| 8 | 6 | 62 | 28.5 | - | 7.8 | - | - | - | - | - | 17 | 160 | 180 | 15 | 380 | 125 | .2 | 331 | - |
| 8 | 13 | 62 | 27.0 | - | 7.7 | - | 18 | - | - | - | 17 | 156 | 186 | 15 | 300 | 80 | .1 | 316 | - |
| 8 | 20 | 62 | 27.0 | - | 7.7 | - | - | - | - | - | 18 | 170 | 200 | 15 | 260 | 95 | .0 | 375 | - |
| 8 | 27 | 62 | 27.0 | - | 7.7 | - | - | - | - | - | 18 | 164 | 206 | - | 220 | - | - | - | - |
| 9 | 4 | 62 | 26.0 | - | 7.7 | - | - | - | - | - | 18 | 160 | 200 | 10 | 220 | 95 | .1 | 370 | - |
| 9 | 10 | 62 | 24.0 | - | 7.8 | - | 30 | - | - | - | 17 | 150 | 190 | 5 | 540 | 85 | .1 | 360 | - |
| 9 | 17 | 62 | 23.5 | - | 7.7 | - | - | - | - | - | 17 | 132 | 202 | 10 | 340 | 85 | .1 | 365 | - |
| 9 | 24 | 62 | 22.0 | - | 7.8 | - | - | - | - | - | 17 | 144 | 200 | 10 | 220 | 85 | .1 | 355 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Thebes, Illinois
Operated by U.S. Geological Survey

STATE Missouri

MAJOR BASIN Upper Mississippi River

MINOR BASIN Mississippi-Cape Girardeau Area

STATION LOCATION Mississippi River at
Cape Girardeau, Missouri

| October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 253.000 | 136.000 | 221.000 | 123.000 | 236.000 | 227.000 | 575.000 | 321.000 | 228.000 | 179.000 | 179.000 | 113.000 |
| 227.000 | 166.000 | 202.000 | 128.000 | 245.000 | 211.000 | 564.000 | 332.000 | 293.000 | 173.000 | 165.000 | 104.000 |
| 216.000 | 236.000 | 188.000 | 120.000 | 238.000 | 204.000 | 549.000 | 331.000 | 360.000 | 167.000 | 159.000 | 105.000 |
| 228.000 | 300.000 | 180.000 | 111.000 | 241.000 | 200.000 | 539.000 | 329.000 | 372.000 | 163.000 | 159.000 | 114.000 |
| 251.000 | 349.000 | 171.000 | 110.000 | 256.000 | 196.000 | 527.000 | 315.000 | 351.000 | 180.000 | 159.000 | 125.000 |
| 263.000 | 390.000 | 163.000 | 120.000 | 270.000 | 186.000 | 519.000 | 294.000 | 332.000 | 200.000 | 155.000 | 138.000 |
| 249.000 | 405.000 | 154.000 | 141.000 | 286.000 | 171.000 | 513.000 | 273.000 | 317.000 | 214.000 | 154.000 | 152.000 |
| 227.000 | 402.000 | 155.000 | 155.000 | 312.000 | 161.000 | 505.000 | 255.000 | 316.000 | 208.000 | 155.000 | 154.000 |
| 213.000 | 384.000 | 158.000 | 156.000 | 320.000 | 161.000 | 498.000 | 242.000 | 326.000 | 196.000 | 145.000 | 159.000 |
| 197.000 | 358.000 | 153.000 | 160.000 | 317.000 | 170.000 | 492.000 | 234.000 | 339.000 | 188.000 | 140.000 | 164.000 |
| 178.000 | 319.000 | 149.000 | 148.000 | 322.000 | 177.000 | 484.000 | 233.000 | 345.000 | 183.000 | 140.000 | 168.000 |
| 166.000 | 282.000 | 147.000 | 138.000 | 307.000 | 180.000 | 479.000 | 246.000 | 347.000 | 182.000 | 139.000 | 168.000 |
| 166.000 | 255.000 | 143.000 | 140.000 | 288.000 | 190.000 | 477.000 | 261.000 | 341.000 | 180.000 | 133.000 | 165.000 |
| 162.000 | 230.000 | 131.000 | 146.000 | 272.000 | 241.000 | 465.000 | 267.000 | 341.000 | 179.000 | 129.000 | 167.000 |
| 182.000 | 221.000 | 118.000 | 142.000 | 257.000 | 292.000 | 457.000 | 264.000 | 352.000 | 177.000 | 120.000 | 158.000 |
| 240.000 | 219.000 | 109.000 | 150.000 | 252.000 | 312.000 | 446.000 | 257.000 | 352.000 | 179.000 | 115.000 | 140.000 |
| 261.000 | 220.000 | 117.000 | 146.000 | 261.000 | 312.000 | 428.000 | 248.000 | 337.000 | 181.000 | 115.000 | 138.000 |
| 255.000 | 251.000 | 122.000 | 134.000 | 269.000 | 299.000 | 412.000 | 243.000 | 316.000 | 193.000 | 117.000 | 140.000 |
| 233.000 | 325.000 | 121.000 | 128.000 | 287.000 | 288.000 | 393.000 | 239.000 | 285.000 | 200.000 | 112.000 | 139.000 |
| 207.000 | 383.000 | 122.000 | 130.000 | 300.000 | 288.000 | 379.000 | 234.000 | 260.000 | 201.000 | 106.000 | 135.000 |
| 179.000 | 404.000 | 127.000 | 129.000 | 291.000 | 329.000 | 364.000 | 227.000 | 243.000 | 195.000 | 103.000 | 134.000 |
| 161.000 | 405.000 | 131.000 | 157.000 | 276.000 | 399.000 | 350.000 | 216.000 | 227.000 | 194.000 | 103.000 | 133.000 |
| 156.000 | 406.000 | 139.000 | 165.000 | 266.000 | 473.000 | 338.000 | 206.000 | 216.000 | 196.000 | 102.000 | 132.000 |
| 151.000 | 394.000 | 149.000 | 152.000 | 269.000 | 528.000 | 330.000 | 200.000 | 210.000 | 198.000 | 102.000 | 132.000 |
| 150.000 | 372.000 | 155.000 | 141.000 | 251.000 | 573.000 | 324.000 | 199.000 | 209.000 | 206.000 | 105.000 | 132.000 |
| 142.000 | 343.000 | 151.000 | 137.000 | 240.000 | 613.000 | 318.000 | 203.000 | 212.000 | 227.000 | 103.000 | 132.000 |
| 137.000 | 310.000 | 147.000 | 144.000 | 240.000 | 625.000 | 315.000 | 204.000 | 205.000 | 237.000 | 100.000 | 129.000 |
| 124.000 | 284.000 | 142.000 | 154.000 | 238.000 | 604.000 | 314.000 | 207.000 | 202.000 | 229.000 | 96.000 | 132.000 |
| 115.000 | 263.000 | 139.000 | 177.000 |  | 591.000 | 317.000 | 211.000 | 203.000 | 213.000 | 102.000 | 144.000 |
| 116.000 | 242.000 | 128.000 | 191.000 |  | 589.000 | 314.000 | 217.000 | 191.000 | 196.000 | 115.000 | 151.000 |
| 118.000 |  | 120.000 | 195.000 |  | 584.000 |  | 219.000 |  | 187.000 | 122.000 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** ILLINOIS
**MAJOR BASIN** UPPER MISSISSIPPI RIVER
**MINOR BASIN** MISSISSIPPI RIVER-ST. LOUIS AREA
**STATION LOCATION** MISSISSIPPI RIVER AT
EAST ST. LOUIS, ILLINOIS 24

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 16 | – | – | – | – | – | – | 28 | 9 | 12 | 6 | 40 | 11 | | | | | | |
| 10 | 9 | 61 | 10 | 20 | 1 | 2 | 1 | 1 | 1 | 2 | 11 | 12 | 4 | 5 | 15 | 13 | | | | | | |
| 10 | 16 | 61 | 10 | 30 | 0 | 1 | 1 | 2 | 1 | 2 | 11 | 10 | 12 | 10 | 23 | 14 | | | | | | |
| 10 | 23 | 61 | 11 | 1 | – | – | – | – | – | – | 0 | 11 | 23 | 15 | 23 | 19 | | | | | | |
| 10 | 30 | 61 | 11 | 3 | – | – | – | – | – | – | 11 | 11 | 56 | 14 | 67 | 18 | | | | | | |
| 11 | 6 | 61 | 11 | 15 | – | – | – | – | – | – | 32 | 10 | 15 | 6 | 47 | 12 | | | | | | |
| 11 | 13 | 61 | 11 | 22 | 1 | 1 | 0 | 2 | 1 | 2 | 47 | 9 | 48 | 10 | 95 | 13 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | – | – | – | – | – | – | 44 | 9 | 11 | 6 | 55 | 11 | | | | | | |
| 11 | 27 | 61 | 12 | 6 | – | – | – | – | – | – | 38 | 8 | 27 | 7 | 65 | 11 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | 0 | 1 | 1 | 2 | 1 | 2 | 19 | 5 | 34 | 7 | 53 | 9 | | | | | | |
| 12 | 11 | 61 | 12 | 15 | – | – | – | – | – | – | 20 | 7 | 30 | 8 | 50 | 11 | | | | | | |
| 12 | 18 | 61 | 12 | 28 | – | – | – | – | – | – | 68 | 11 | 38 | 9 | 106 | 17 | | | | | | |
| 1 | 8 | 62 | 1 | 16 | 0 | 1 | 2 | 2 | 2 | 2 | 27 | 9 | 38 | 11 | 65 | 14 | | | | | | |
| 1 | 15 | 62 | 1 | 25 | – | – | – | – | – | – | 33 | 6 | 32 | 8 | 65 | 10 | | | | | | |
| 1 | 22 | 62 | 1 | 30 | – | – | – | – | – | – | 7 | 5 | 25 | 9 | 32 | 10 | | | | | | |
| 1 | 29 | 62 | 2 | 6 | – | – | – | – | – | – | 20 | 12 | 44 | 14 | 64 | 18 | | | | | | |
| 2 | 12 | 62 | 2 | 23 | 2 | 2 | 0 | 0 | 2 | 2 | 27 | 6 | 115 | 6 | 142 | 8 | | | | | | |
| 2 | 19 | 62 | 3 | 2 | – | – | – | – | – | – | 20 | 10 | 42 | 11 | 62 | 15 | | | | | | |
| 2 | 26 | 62 | 3 | 7 | – | – | – | – | – | – | 72 | 14 | 43 | 13 | 115 | 19 | | | | | | |
| 3 | 5 | 62 | 3 | 16 | – | – | – | – | – | – | 34 | 5 | 19 | 5 | 53 | 9 | | | | | | |
| 3 | 12 | 62 | 3 | 22 | 2 | 1 | 0 | 2 | 2 | 2 | 65 | 7 | 39 | 7 | 104 | 10 | | | | | | |
| 3 | 19 | 62 | 3 | 30 | – | – | – | – | – | – | 174 | 10 | 101 | 7 | 275 | 12 | | | | | | |
| 3 | 26 | 62 | 4 | 5 | – | – | – | – | – | – | 132 | 18 | 53 | 8 | 185 | 20 | | | | | | |
| 4 | 2 | 62 | 4 | 12 | – | – | – | – | – | – | 49 | 9 | 50 | 8 | 99 | 12 | | | | | | |
| 4 | 9 | 62 | 4 | 23 | 3 | 3 | 0 | 1 | 3 | 3 | 76 | 13 | 45 | 6 | 121 | 14 | | | | | | |
| 4 | 16 | 62 | 4 | 27 | – | – | – | – | – | – | 18 | 8 | 32 | 8 | 50 | 11 | | | | | | |
| 4 | 23 | 62 | 5 | 22 | – | – | – | – | – | – | 36 | 10 | 22 | 10 | 58 | 14 | | | | | | |
| 4 | 30 | 62 | 5 | 31 | – | – | – | – | – | – | 45 | 11 | 9 | 9 | 54 | 14 | | | | | | |
| 5 | 7 | 62 | 6 | 11 | – | – | – | – | – | – | 16 | 9 | 22 | 10 | 38 | 14 | | | | | | |
| 5 | 14 | 62 | 6 | 20 | 10 | 55 | 0 | 0 | 10 | 55 | 84 | 20 | 29 | 8 | 113 | 22 | | | | | | |
| 5 | 21 | 62 | 6 | 27 | – | – | – | – | – | – | 40 | 11 | 45 | 10 | 85 | 15 | | | | | | |
| 5 | 28 | 62 | 6 | 30 | – | – | – | – | – | – | 34 | 5 | 32 | 5 | 66 | 7 | | | | | | |
| 6 | 4 | 62 | 7 | 5 | – | – | – | – | – | – | 116 | 43 | 38 | 9 | 154 | 44 | | | | | | |
| 6 | 11 | 62 | 7 | 9 | 4 | 8 | 2 | 2 | 6 | 8 | 157 | 69 | 27 | 8 | 184 | 69 | | | | | | |
| 6 | 18 | 62 | 7 | 16 | – | – | – | – | – | – | 49 | 61 | 28 | 9 | 77 | 62 | | | | | | |
| 6 | 25 | 62 | 9 | 9 | – | – | – | – | – | – | 15 | 5 | 26 | 6 | 41 | 8 | | | | | | |
| 7 | 2 | 62 | 7 | 26 | – | – | – | – | – | – | 13 | 7 | 36 | 8 | 49 | 11 | | | | | | |
| 7 | 9 | 62 | 8 | 15 | 0 | 0 | 0 | 1 | 0 | 1 | 22 | 6 | 57 | 9 | 79 | 11 | | | | | | |
| 7 | 30 | 62 | 8 | 21 | – | – | – | – | – | – | 13 | 7 | 30 | 9 | 43 | 11 | | | | | | |
| 8 | 7 | 62 | 8 | 27 | – | – | – | – | – | – | 0 | 3 | 15 | 4 | 15 | 5 | | | | | | |
| 8 | 13 | 62 | 8 | 29 | – | – | – | – | – | – | 4 | 5 | 23 | 8 | 27 | 9 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 8 | 20 | 62 | 9 | 5 | - | - | - | - | - | - | 6 | 12 | 31 | 14 | 37 | 18 | | | | | | |
| 8 | 27 | 62 | 9 | 6 | - | - | - | - | - | - | 8 | 11 | 30 | 13 | 38 | 17 | | | | | | |
| 9 | 4 | 62 | 9 | 28 | - | - | - | - | - | - | 4 | 7 | 18 | 10 | 22 | 12 | | | | | | |
| 9 | 10 | 62 | 9 | 24 | 0 | 1 | 2 | 2 | 2 | 2 | 11 | 6 | 33 | 8 | 44 | 10 | | | | | | |
| 9 | 17 | 62 | 10 | 15 | - | - | - | - | - | - | 39 | 28 | 25 | 8 | 64 | 29 | | | | | | |
| 9 | 24 | 62 | 10 | 15 | - | - | - | - | - | - | 7 | 6 | 16 | 8 | 23 | 10 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** ILLINOIS

**MAJOR BASIN** UPPER MISSISSIPPI RIVER

**MINOR BASIN** MISSISSIPPI RIVER-ST. LOUIS AREA

**STATION LOCATION** MISSISSIPPI RIVER AT

EAST ST. LOUIS, ILLINOIS 24

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 600 | 0 | 0 | 60 | 0 | 0 | 0 | 390 | 120 | 190 | 170 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 2400 | 0 | 40 | 100 | 0 | 270 | 20 | 1700 | 250 | 540 | 190 | | | | | | | | | | | | | | | | | | | | |
| 10 | 23 | 61 | 2100 | 20 | 0 | 380 | 180 | 270 | 50 | 1160 | 50 | 1070 | 180 | 71 | 3 | 69 | 2 | 50 | 1 | 57 | 1 | 38 | 1 | | | | | | | | | | |
| 11 | 6 | 61 | 5000 | 0 | 0 | 170 | 0 | 150 | 20 | 3910 | 730 | 500 | 310 | 71 | 4 | 68 | 3 | 69 | 3 | 88 | 1 | | | | | | | | | | | | |
| 11 | 20 | 61 | 4300 | 0 | 0 | 80 | 0 | 40 | 0 | 3870 | 330 | 190 | 100 | 71 | 5 | 69 | 2 | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 20 | 100 | 20 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 8200 | 0 | 0 | 170 | 0 | 250 | 0 | 7600 | 190 | 750 | 20 | 71 | 6 | 51 | 1 | | | | | | | | | | | | | | | | |
| 1 | 8 | 62 | 9300 | 50 | 20 | 200 | 0 | 770 | 140 | 7700 | 450 | 1190 | 0 | 71 | 6 | 68 | 3 | 51 | 3 | 69 | 2 | 67 | 1 | | | | | | | | | | |
| 1 | 15 | 62 | 3000 | 0 | 40 | 20 | 0 | 110 | 0 | 2680 | 110 | 250 | 130 | 71 | 3 | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 1100 | 0 | 20 | 0 | 0 | 70 | 20 | 650 | 340 | 140 | 90 | 71 | 2 | 88 | 1 | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 500 | 0 | 0 | 0 | 0 | 50 | 70 | 160 | 250 | 50 | 20 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 2100 | 0 | 0 | 40 | 0 | 120 | 40 | 1640 | 230 | 120 | 20 | 71 | 3 | 68 | 1 | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 1500 | 0 | 0 | 80 | 0 | 420 | 80 | 500 | 410 | 120 | 150 | 71 | 2 | 51 | 1 | 57 | 1 | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 900 | 0 | 0 | 0 | 0 | 0 | 60 | 440 | 410 | 210 | 80 | 69 | 1 | 71 | 1 | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 4400 | 20 | 80 | 230 | 20 | 730 | 600 | 2090 | 660 | 480 | 120 | 71 | 4 | 51 | 2 | 69 | 2 | 63 | 2 | 62 | 1 | 88 | 1 | 68 | 1 | | | | | | |
| 5 | 7 | 62 | 10000 | 60 | 130 | 990 | 910 | 60 | 150 | 6440 | 1250 | 5060 | 990 | 71 | 6 | 50 | 3 | 24 | 3 | 92 | 2 | 38 | 2 | 69 | 1 | 88 | 1 | 91 | 1 | | | | |
| 5 | 21 | 62 | 9500 | 0 | 0 | 580 | 390 | 290 | 60 | 4640 | 3560 | 2380 | 410 | 71 | 5 | 88 | 4 | 92 | 4 | 69 | 2 | 68 | 2 | 50 | 2 | 38 | 2 | 82 | 1 | 87 | 1 | | |
| 6 | 4 | 62 | 3500 | 0 | 0 | 230 | 20 | 60 | 20 | 1840 | 1370 | 770 | 170 | 71 | 4 | 88 | 3 | 92 | 2 | 69 | 1 | | | | | | | | | | | | |
| 6 | 18 | 62 | 4200 | 0 | 20 | 410 | 40 | 270 | 120 | 2480 | 870 | 1240 | 310 | 71 | 4 | 69 | 2 | 88 | 2 | 68 | 1 | 38 | 1 | | | | | | | | | | |
| 7 | 2 | 62 | 3800 | 40 | 0 | 290 | 20 | 80 | 40 | 2770 | 520 | 580 | 120 | 67 | 4 | 69 | 1 | 88 | 1 | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 2300 | 0 | 0 | 190 | 0 | 60 | 40 | 1330 | 700 | 210 | 250 | 67 | 3 | 88 | 2 | 69 | 2 | | | | | | | | | | | | | | |
| 8 | 7 | 62 | 1800 | 0 | 0 | 230 | 0 | 120 | 0 | 1160 | 330 | 370 | 40 | 68 | 2 | 69 | 1 | 71 | 1 | 67 | 1 | | | | | | | | | | | | |
| 8 | 20 | 62 | 7900 | 410 | 0 | 850 | 0 | 1180 | 60 | 4060 | 1330 | 910 | 290 | 71 | 4 | 68 | 4 | 51 | 3 | 92 | 3 | 69 | 3 | 2 | 2 | 88 | 2 | 67 | 1 | 38 | 1 | | |
| 9 | 4 | 62 | 14400 | 390 | 0 | 990 | 80 | 330 | 210 | 10970 | 1450 | 1410 | 410 | 71 | 5 | 68 | 5 | 69 | 5 | 92 | 3 | 88 | 2 | 51 | 1 | 32 | 1 | 3 | 1 | 63 | 1 | 2 | 1 |
| 9 | 17 | 62 | 2500 | 80 | 40 | 190 | 0 | 0 | 0 | 1780 | 410 | 1080 | 170 | 71 | 3 | 69 | 3 | 68 | 2 | 87 | 1 | | | | | | | | | | | | |

# PLANKTON POPULATION

**MAJOR BASIN** UPPER MISSISSIPPI RIVER

**MINOR BASIN** MISSISSIPPI RIVER-ST. LOUIS AREA

**STATION LOCATION** MISSISSIPPI RIVER AT

EAST ST. LOUIS, ILLINOIS 024

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 56 | 43 | 58 | 35 | 83 | 6 | 26 | 4 | 12 | 0 | 0 | 7 | | | | | | | | | | | 7 | 75 | 1 | 76 | 1 | | | 0 | 0 |
| 10 | 16 | 61 | 58 | 44 | 56 | 38 | 83 | 16 | | 1 | 1 | 0 | 0 | 8 | 11 | 2 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 23 | 61 | 56 | 30 | 83 | 27 | 58 | 27 | 26 | 5 | 11 | 50 | 0 | 2 | | | | | | | | | | | 7 | 77 | 1 | 76 | 1 | | | 1 | 0 |
| 11 | 6 | 61 | 56 | 30 | 83 | 13 | 58 | 11 | 80 | 11 | 35 | 0 | 0 | 4 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 83 | 63 | 56 | 25 | 80 | 3 | 47 | 2 | 7 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 82 | 55 | 80 | 13 | 83 | 5 | 57 | 3 | 24 | 0 | 0 | 23 | 11 | 2 | 2 | 1 | | | | | | | 1 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 80 | 78 | 83 | 9 | 71 | 3 | 82 | 2 | 8 | 0 | 0 | 9 | 11 | 1 | | | | | | | | | 4 | | | | | | | 1 | 0 |
| 1 | 8 | 62 | 80 | 23 | 83 | 18 | 70 | 8 | 56 | 8 | 43 | 50 | 10 | 13 | 21 | 1 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 80 | 53 | 26 | 5 | 92 | 5 | 95 | 4 | 33 | 110 | 0 | 10 | | | | | | | | | | | 4 | 50 | 1 | | | | | 0 | 0 |
| 2 | 5 | 62 | 71 | 21 | 80 | 18 | 83 | 15 | 56 | 6 | 40 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 90 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 83 | 24 | 71 | 15 | 92 | 12 | 26 | 10 | 39 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 92 | 9 | 62 | 9 | 36 | 8 | 56 | 6 | 68 | 80 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 83 | 20 | 56 | 19 | 26 | 13 | 58 | 7 | 41 | 0 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 56 | 28 | 80 | 11 | 82 | 10 | 26 | 9 | 42 | 20 | 0 | 7 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 82 | 68 | 56 | 14 | 92 | 4 | 80 | 4 | 10 | 20 | 0 | 46 | 2 | 3 | 11 | 2 | | | | | | | 16 | 76 | 3 | | | | | 0 | 4 |
| 5 | 21 | 62 | 56 | 38 | 80 | 12 | 58 | 12 | 83 | 7 | 31 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 80 | 23 | 56 | 21 | 71 | 18 | 92 | 10 | 28 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 83 | 41 | 56 | 14 | 80 | 11 | 58 | 10 | 24 | 20 | 0 | 0 | | | | | | | | | | | 5 | 76 | 1 | | | | | 0 | 0 |
| 7 | 2 | 62 | 20 | 75 | 56 | 10 | 58 | 8 | 26 | 2 | 5 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 20 | 61 | 58 | 10 | 56 | 9 | 26 | 9 | 11 | 0 | 0 | 0 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 8 | 7 | 62 | 56 | 42 | 26 | 19 | 58 | 16 | 20 | 9 | 14 | 0 | 0 | 105 | 17 | 4 | 16 | 2 | 11 | 1 | 2 | 1 | | | 19 | 77 | 3 | 51 | 1 | 76 | 1 | 3 | 0 |
| 8 | 20 | 62 | 82 | 29 | 26 | 18 | 56 | 18 | 58 | 6 | 29 | 0 | 0 | 246 | 2 | 6 | 17 | 3 | 11 | 2 | 3 | 1 | 18 | 1 | 3 | 76 | 1 | | | | | 0 | 0 |
| 9 | 4 | 62 | 82 | 27 | 26 | 27 | 58 | 19 | 56 | 9 | 18 | 0 | 0 | 396 | 2 | 6 | 22 | 4 | 17 | 4 | 11 | 3 | 15 | 1 | 28 | 50 | 3 | 51 | 2 | 76 | 2 | 0 | 0 |
| 9 | 17 | 62 | 82 | 34 | 26 | 23 | 58 | 17 | 56 | 11 | 15 | 20 | 0 | 61 | 17 | 3 | 11 | 3 | 2 | 1 | | | | | 12 | 76 | 2 | 50 | 1 | 77 | 1 | 0 | 0 |

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATION LOCATION** MISSISSIPPI RIVER AT
EAST ST. LOUIS, ILLINOIS 24

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLOROFORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGENATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 2 | 61 | 10 | 12 | 4198 | 201 | 50 | 151 | 1 | 10 | 20 | 1 | 1 | 16 | 2 | 8 | 4 | 1 | 6 |
| 11 | 7 | 61 | 11 | 18 | 2765 | 298 | 84 | 214 | 3 | 20 | 25 | 2 | 2 | 20 | 1 | 9 | 7 | 3 | 17 |
| 12 | 11 | 61 | 12 | 20 | 3531 | 205 | 41 | 164 | 0 | 7 | 23 | 3 | 3 | 15 | 2 | 5 | 2 | 1 | 3 |
| 1 | 8 | 62 | 1 | 18 | 3792 | 246 | 79 | 167 | 2 | 18 | 31 | 4 | 4 | 20 | 3 | 9 | 6 | 1 | 12 |
| 2 | 5 | 62 | 2 | 16 | 4899 | 163 | 64 | 99 | 3 | 13 | 22 | 2 | 2 | 17 | 1 | 8 | 6 | 1 | 11 |
| 3 | 5 | 62 | 3 | 16 | 4857 | 165 | 41 | 124 | 1 | 7 | 17 | 1 | 1 | 15 | 0 | 5 | 3 | 1 | 7 |
| 4 | 2 | 62 | 4 | 12 | 3782 | 156 | 58 | 98 | 2 | 15 | 20 | 2 | 1 | 16 | 1 | 7 | 6 | 1 | 7 |
| 5 | 1 | 62 | 5 | 8 | 1815# | 439 | 148 | 291 | 4 | 36 | 40 | 5 | 2 | 32 | 1 | 21 | 16 | 3 | 28 |
| 6 | 4 | 62 | 6 | 12 | 4717 | 147 | 57 | 90 | 1 | 17 | 13 | 1 | 1 | 11 | 0 | 7 | 6 | 1 | 12 |
| 7 | 5 | 62 | 7 | 14 | 5218 | 141 | 67 | 74 | 3 | 15 | 18 | 1 | 1 | 15 | 1 | 8 | 7 | 1 | 15 |
| 8 | 6 | 62 | 8 | 13 | 3635 | 229 | 91 | 138 | 2 | 25 | 21 | 1 | 1 | 17 | 2 | 11 | 10 | 2 | 20 |
| 9 | 4 | 62 | 9 | 13 | 3636 | 164 | 42 | 122 | 0 | 11 | 9 | 1 | 1 | 7 | 0 | 4 | 3 | 1 | 14 |

# ESTIMATED

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MINOR BASIN** MISSISSIPPI RIVER-ST. LOUIS AREA

**STATION LOCATION** MISSISSIPPI RIVER AT
EAST ST. LOUIS, ILLINOIS 24

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 18.2 | 8.6 | 7.5 | 3.4 | - | - | - | .1 | 12 | 98 | 130 | 30 | 350 | 51 | .3 | 206 | 20000 |
| 10 | 9 | 61 | 17.7 | 8.9 | 7.7 | 4.9 | - | - | - | .1 | 14 | 140 | 192 | 25 | 250 | 73 | .3 | 240 | 10000 |
| 10 | 13 | 61 | - | - | - | - | 21 | - | - | - | - | - | - | - | - | - | - | - | - |
| 10 | 16 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2400 |
| 10 | 23 | 61 | 16.1 | 8.6 | 7.9 | 3.8 | - | - | - | .1 | 16 | 166 | 228 | 23 | 150 | 73 | .3 | 220 | 9000 |
| 10 | 30 | 61 | 14.8 | 9.2 | 8.0 | 4.0 | - | - | - | .1 | 17 | 176 | 236 | 20 | 100 | 78 | .3 | 224 | 11000 |
| 11 | 6 | 61 | 12.6 | 8.9 | 7.6 | 6.2 | - | - | - | .1 | 14 | 128 | 166 | 29 | 650 | 48 | .4 | 198 | 11000 |
| 11 | 13 | 61 | 9.9 | 10.8 | 7.8 | 4.6 | - | - | - | .1 | 15 | 156 | 220 | 20 | 400 | 70 | .3 | 210 | 8000 |
| 11 | 20 | 61 | - | - | - | - | 33 | - | - | - | - | - | - | - | - | - | - | - | 16000 |
| 11 | 27 | 61 | 8.9 | 10.0 | 7.8 | 5.6 | - | - | - | .1 | 12 | 136 | 188 | 24 | 600 | 50 | - | 201 | 6000 |
| 12 | 4 | 61 | 6.7 | 11.9 | 7.7 | 4.0 | - | - | - | .1 | 16 | 168 | 252 | 20 | 50 | 60 | .2 | 248 | 900 |
| 12 | 11 | 61 | 5.0 | 12.6 | 7.9 | 4.3 | - | - | - | .1 | 17 | 188 | 280 | 18 | 100 | 66 | - | 260 | 3300 |
| 12 | 21 | 61 | - | - | - | - | 21 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 8 | 62 | 1.1 | 14.3 | 7.8 | 4.4 | - | - | - | .6 | 16 | 196 | 248 | 17 | 50 | 73 | .4 | 303 | 2700 |
| 1 | 15 | 62 | 1.1 | 14.0 | 7.8 | 4.0 | - | - | - | .7 | 16 | 180 | 234 | 2 | 50 | 56 | - | 296 | 8700 |
| 1 | 18 | 62 | - | - | - | - | 16 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 22 | 62 | .6 | 13.5 | 7.7 | 4.6 | - | - | - | .8 | 19 | 200 | 260 | 26 | 50 | 78 | .4 | 301 | 2400 |
| 1 | 29 | 62 | 1.1 | 13.0 | 7.8 | 5.4 | - | - | - | .7 | 19 | 180 | 240 | 26 | 80 | 78 | .3 | 285 | 3300 |
| 2 | 5 | 62 | 1.1 | 12.0 | 7.7 | 5.6 | - | - | - | .9 | 19 | 156 | 220 | 20 | 100 | 73 | .3 | 290 | 1100 |
| 2 | 12 | 62 | 1.1 | 11.5 | 7.6 | 6.4 | - | - | - | .8 | 16 | 140 | 204 | 20 | 250 | 62 | .2 | 250 | 1000 |
| 2 | 16 | 62 | - | - | - | - | 16 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 19 | 62 | 3.3 | 12.5 | 7.7 | 4.5 | - | - | - | .8 | 18 | 160 | 212 | 20 | 200 | 68 | - | 298 | 2500 |
| 2 | 26 | 62 | 2.8 | 13.5 | 7.6 | 5.5 | - | - | - | .8 | 17 | 152 | 220 | 19 | 175 | 68 | - | 280 | 4200 |
| 3 | 5 | 62 | 1.7 | 13.8 | 7.8 | 5.0 | - | - | - | .8 | 16 | 168 | 236 | 20 | 175 | 62 | .2 | 298 | 1900 |
| 3 | 12 | 62 | 2.8 | 13.0 | 8.0 | 6.0 | - | - | - | .8 | 18 | 176 | 248 | 20 | 150 | 76 | .2 | 300 | 5700 |
| 3 | 15 | 62 | - | - | - | - | 32 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 19 | 62 | 2.8 | 12.9 | 7.8 | 7.3 | - | - | - | .7 | 14 | 132 | 180 | 24 | 450 | 53 | .3 | 220 | 2000 |
| 3 | 26 | 62 | 5.0 | 11.5 | 7.5 | 5.7 | - | - | - | .6 | 12 | 96 | 132 | 21 | 650 | 37 | - | 198 | *100 |
| 4 | 2 | 62 | 7.8 | 10.9 | 7.6 | 5.2 | - | - | - | - | 12 | 124 | 172 | 22 | 175 | 50 | .3 | 186 | 1100 |
| 4 | 9 | 62 | 8.3 | 10.2 | 7.6 | 5.4 | - | - | - | .5 | 12 | 124 | 180 | 20 | 200 | 48 | - | 216 | 2500 |
| 4 | 13 | 62 | - | - | - | - | 37 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 16 | 62 | 8.3 | 10.8 | 7.8 | 3.4 | - | - | - | .3 | 14 | 140 | 196 | 25 | 175 | 50 | .4 | 226 | 1400 |
| 4 | 23 | 62 | 11.5 | 10.0 | 7.7 | 3.2 | - | - | - | .2 | 15 | 142 | 204 | 23 | 175 | 52 | .4 | 228 | 1300 |
| 4 | 30 | 62 | 16.6 | 9.0 | 7.9 | 3.9 | - | - | - | .1 | 15 | 144 | 204 | 25 | 175 | 63 | - | 222 | 2200 |
| 5 | 7 | 62 | 18.8 | 9.1 | 7.8 | 4.8 | - | - | - | .1 | 15 | 166 | 220 | 24 | 200 | 71 | .4 | - | 2000 |
| 5 | 14 | 62 | 19.9 | 8.8 | 7.9 | 5.4 | - | - | - | .1 | 13 | 144 | 188 | 21 | 900 | 65 | .3 | - | 3000 |
| 5 | 11 | 62 | - | - | - | - | 18 | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 21 | 62 | 22.7 | 7.6 | 7.7 | 5.0 | - | - | - | .1 | 15 | 164 | 216 | 21 | 400 | 70 | .4 | 232 | 1300 |
| 5 | 28 | 62 | 23.8 | 7.4 | 7.9 | 4.6 | - | - | - | .1 | 16 | 168 | 224 | 19 | 200 | 70 | - | 230 | 4300 |

**MINOR BASIN** MISSISSIPPI RIVER-ST. LOUIS AREA

**STATION LOCATION** MISSISSIPPI RIVER AT

EAST ST. LOUIS, ILLINOIS 24

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 4 | 62 | 22.2 | 5.1 | 7.8 | 4.0 | - | - | - | .1 | 12 | 140 | 164 | 26 | 800 | 51 | .2 | 194 | 10000 |
| 6 | 11 | 62 | 23.8 | 5.0 | 7.9 | 3.0 | - | - | - | .1 | 11 | 136 | 160 | 29 | 800 | 48 | .3 | 196 | 9000 |
| 6 | 13 | 62 | - | - | - | - | 27 | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 18 | 62 | 24.4 | 7.6 | 8.0 | 5.3 | - | - | - | .1 | 12 | 148 | 196 | 29 | 400 | 55 | .2 | 298 | 4700 |
| 6 | 25 | 62 | 26.2 | 7.7 | 7.9 | 6.0 | - | - | - | .1 | 15 | 160 | 212 | 32 | 250 | 64 | - | 304 | 3000 |
| 7 | 2 | 62 | 28.2 | 7.3 | 7.8 | 6.0 | - | - | - | .1 | 16 | 160 | 212 | 29 | 150 | 68 | - | 310 | 3700 |
| 7 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5000 |
| 7 | 11 | 62 | 27.7 | 6.8 | 7.6 | 4.2 | - | - | - | .1 | 12 | 136 | 184 | 30 | 700 | 54 | - | 194 | - |
| 7 | 16 | 62 | 28.8 | 7.0 | 8.0 | 5.1 | - | - | - | .1 | 15 | 158 | 212 | 28 | 200 | 62 | .2 | 235 | 4700 |
| 7 | 17 | 62 | - | - | - | - | 18 | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 23 | 62 | 27.7 | 6.2 | 7.8 | 4.9 | - | - | - | .1 | 14 | 156 | 208 | 26 | 150 | 55 | .3 | 210 | 4500 |
| 7 | 30 | 62 | 26.2 | 7.1 | 8.0 | 5.4 | - | - | - | .1 | 15 | 164 | 224 | 26 | 200 | 55 | .3 | - | 5900 |
| 8 | 7 | 62 | 26.8 | 7.6 | 7.8 | 5.4 | - | - | - | .1 | 15 | 162 | 216 | 26 | 150 | 63 | .4 | 312 | 4000 |
| 8 | 13 | 62 | 26.8 | 6.0 | 8.0 | 4.5 | - | - | - | .1 | 16 | 170 | 236 | 22 | 150 | 60 | - | 334 | 13000 |
| 8 | 15 | 62 | - | - | - | - | 17 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 20 | 62 | 26.8 | - | 8.2 | - | - | - | - | .1 | 17 | 178 | 244 | 29 | 80 | 71 | - | 322 | 74000 |
| 8 | 27 | 62 | 26.8 | 7.7 | 8.4 | 3.2 | - | - | - | .1 | 18 | 172 | 248 | 26 | 80 | 78 | .4 | 330 | 49000 |
| 9 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 8500 |
| 9 | 4 | 62 | 26.2 | - | 8.2 | - | - | - | - | .1 | 16 | 174 | 256 | 30 | 100 | 74 | .4 | 310 | - |
| 9 | 10 | 62 | 23.3 | - | 8.0 | - | - | - | - | .1 | 16 | 172 | 232 | 30 | 200 | 64 | .4 | 317 | 8500 |
| 9 | 16 | 62 | - | - | - | - | 32 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 17 | 62 | 23.8 | 6.2 | 7.8 | 4.2 | - | - | - | - | 14 | 160 | 204 | 25 | 100 | 52 | .3 | - | 3100 |
| 9 | 24 | 62 | 21.0 | 7.1 | 8.0 | 2.0 | - | - | - | .1 | 16 | 164 | 212 | 24 | 100 | 56 | .4 | 332 | 500 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Alton, Illinois
Operated by U.S. Geological Survey

MAJOR BASIN Upper Mississippi River

MINOR BASIN Mississippi River-St. Louis Area

STATION LOCATION Mississippi River at
East St. Louis, Illinois

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 94.600 | 136.000 | 112.000 | 65.700 | 85.100 | 70.400 | 296.000 | 221.000 | 169.000 | 80.100 | 90.800 | 52.000 |
| 2 | 115.000 | 138.000 | 113.000 | 61.800 | 83.100 | 83.500 | 298.000 | 211.000 | 180.000 | 75.300 | 91.800 | 63.100 |
| 3 | 134.000 | 154.000 | 106.000 | 64.400 | 83.600 | 89.400 | 298.000 | 203.000 | 185.000 | 83.300 | 84.800 | 71.300 |
| 4 | 132.000 | 173.000 | 104.000 | 71.100 | 88.300 | 95.000 | 300.000 | 193.000 | 190.000 | 108.000 | 83.200 | 78.900 |
| 5 | 132.000 | 189.000 | 94.800 | 75.900 | 101.000 | 85.300 | 307.000 | 185.000 | 197.000 | 124.000 | 82.700 | 73.900 |
| 6 | 120.000 | 199.000 | 101.000 | 80.500 | 102.000 | 82.800 | 314.000 | 176.000 | 188.000 | 124.000 | 93.300 | 78.600 |
| 7 | 116.000 | 203.000 | 98.600 | 74.600 | 122.000 | 81.800 | 319.000 | 168.000 | 176.000 | 114.000 | 79.900 | 97.000 |
| 8 | 116.000 | 191.000 | 95.200 | 74.600 | 119.000 | 84.000 | 324.000 | 168.000 | 177.000 | 106.000 | 72.900 | 101.000 |
| 9 | 97.300 | 156.000 | 90.100 | 63.700 | 140.000 | 89.800 | 331.000 | 168.000 | 190.000 | 98.900 | 71.400 | 110.000 |
| 10 | 90.000 | 134.000 | 86.600 | 62.200 | 146.000 | 95.300 | 335.000 | 174.000 | 196.000 | 98.900 | 73.800 | 108.000 |
| 11 | 97.700 | 118.000 | 81.000 | 68.600 | 120.000 | 92.800 | 334.000 | 190.000 | 199.000 | 96.600 | 68.900 | 99.900 |
| 12 | 93.100 | 118.000 | 78.700 | 72.100 | 110.000 | 115.000 | 333.000 | 201.000 | 193.000 | 91.900 | 64.300 | 106.000 |
| 13 | 88.400 | 121.000 | 66.100 | 69.300 | 104.000 | 163.000 | 326.000 | 196.000 | 185.000 | 88.500 | 58.800 | 103.000 |
| 14 | 93.600 | 130.000 | 53.000 | 65.200 | 103.000 | 177.000 | 316.000 | 186.000 | 191.000 | 91.900 | 57.800 | 77.800 |
| 15 | 100.000 | 123.000 | 53.000 | 66.600 | 107.000 | 175.000 | 303.000 | 181.000 | 195.000 | 93.200 | 59.900 | 75.700 |
| 16 | 104.000 | 117.000 | 55.500 | 60.500 | 121.000 | 168.000 | 291.000 | 179.000 | 193.000 | 113.000 | 67.300 | 81.600 |
| 17 | 107.000 | 144.000 | 62.600 | 62.600 | 122.000 | 155.000 | 281.000 | 177.000 | 181.000 | 121.000 | 61.200 | 82.500 |
| 18 | 99.100 | 187.000 | 63.400 | 63.900 | 132.000 | 152.000 | 268.000 | 175.000 | 159.000 | 120.000 | 60.500 | 80.100 |
| 19 | 75.400 | 204.000 | 71.700 | 62.900 | 127.000 | 156.000 | 259.000 | 171.000 | 145.000 | 113.000 | 55.700 | 77.200 |
| 20 | 60.400 | 213.000 | 73.000 | 62.200 | 120.000 | 174.000 | 250.000 | 159.000 | 136.000 | 111.000 | 61.300 | 76.800 |
| 21 | 71.000 | 224.000 | 67.500 | 60.800 | 111.000 | 225.000 | 243.000 | 151.000 | 122.000 | 124.000 | 59.900 | 76.800 |
| 22 | 67.200 | 229.000 | 72.300 | 58.100 | 110.000 | 241.000 | 241.000 | 144.000 | 112.000 | 131.000 | 58.800 | 77.300 |
| 23 | 70.500 | 225.000 | 80.500 | 58.300 | 108.000 | 279.000 | 239.000 | 141.000 | 107.000 | 120.000 | 53.800 | 74.800 |
| 24 | 72.300 | 207.000 | 77.200 | 59.400 | 104.000 | 305.000 | 234.000 | 138.000 | 102.000 | 123.000 | 56.200 | 77.300 |
| 25 | 71.700 | 177.000 | 79.600 | 60.000 | 94.000 | 324.000 | 230.000 | 138.000 | 98.400 | 130.000 | 52.400 | 79.000 |
| 26 | 67.300 | 156.000 | 82.300 | 59.200 | 104.000 | 336.000 | 230.000 | 140.000 | 97.000 | 131.000 | 44.800 | 76.800 |
| 27 | 57.000 | 154.000 | 85.500 | 69.000 | 106.000 | 333.000 | 227.000 | 143.000 | 99.900 | 123.000 | 48.300 | 73.100 |
| 28 | 63.800 | 145.000 | 75.600 | 73.500 | 90.400 | 325.000 | 226.000 | 147.000 | 91.000 | 116.000 | 58.000 | 70.300 |
| 29 | 62.200 | 134.000 | 55.800 | 73.600 |  | 317.000 | 226.000 | 149.000 | 76.200 | 110.000 | 63.000 | 68.600 |
| 30 | 85.400 | 126.000 | 60.200 | 82.900 |  | 303.000 | 224.000 | 144.000 | 78.300 | 110.000 | 57.200 | 58.900 |
| 31 | 112.000 |  | 72.900 | 89.200 |  | 297.000 |  | 149.000 |  | 99.300 | 51.600 |  |

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** MISSISSIPPI DES MOINES SKUNK RIVERS

**STATION LOCATION** MISSISSIPPI RIVER AT

BURLINGTON, IOWA 25

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 16 | 1 | 1 | 1 | 2 | 2 | 2 | 4 | 5 | 23 | 6 | 27 | 8 | | | | | | |
| 10 | 9 | 61 | 10 | 24 | - | - | - | - | - | - | 1 | 6 | 9 | 7 | 10 | 9 | | | | | | |
| 10 | 16 | 61 | 10 | 25 | - | - | - | - | - | - | 12 | 7 | 28 | 8 | 40 | 11 | | | | | | |
| 10 | 23 | 61 | 11 | 2 | - | - | - | - | - | - | 17 | 7 | 20 | 8 | 37 | 11 | | | | | | |
| 10 | 30 | 61 | 11 | 7 | - | - | - | - | - | - | 113 | 10 | 25 | 8 | 138 | 13 | | | | | | |
| 11 | 6 | 61 | 11 | 16 | 6 | 5 | 0 | 1 | 6 | 5 | 68 | 12 | 41 | 8 | 109 | 14 | | | | | | |
| 11 | 20 | 61 | 12 | 4 | - | - | - | - | - | - | 21 | 7 | 34 | 8 | 55 | 11 | | | | | | |
| 11 | 27 | 61 | 12 | 6 | - | - | - | - | - | - | 34 | 7 | 30 | 8 | 64 | 11 | | | | | | |
| 12 | 4 | 61 | 12 | 14 | 4 | 3 | 0 | 1 | 4 | 3 | 15 | 7 | 17 | 6 | 32 | 9 | | | | | | |
| 12 | 11 | 61 | 12 | 19 | - | - | - | - | - | - | 12 | 6 | 15 | 8 | 27 | 10 | | | | | | |
| 12 | 18 | 61 | 1 | 3 | - | - | - | - | - | - | 6 | 5 | 17 | 8 | 23 | 9 | | | | | | |
| 1 | 2 | 62 | 1 | 15 | 0 | 0 | 2 | 1 | 2 | 1 | 3 | 4 | 11 | 6 | 13 | 7 | | | | | | |
| 1 | 15 | 62 | 2 | 6 | - | - | - | - | - | - | 3 | 5 | 16 | 7 | 19 | 9 | | | | | | |
| 1 | 22 | 62 | 2 | 1 | - | - | - | - | - | - | 3 | 5 | 25 | 8 | 28 | 9 | | | | | | |
| 1 | 29 | 62 | 2 | 8 | - | - | - | - | - | - | 1 | 8 | 8 | 10 | 9 | 13 | | | | | | |
| 2 | 5 | 62 | 2 | 15 | 1 | 1 | 1 | 2 | 2 | 2 | 36 | 6 | 23 | 6 | 59 | 8 | | | | | | |
| 2 | 19 | 62 | 3 | 2 | - | - | - | - | - | - | 7 | 5 | 12 | 8 | 19 | 9 | | | | | | |
| 2 | 26 | 62 | 3 | 9 | - | - | - | - | - | - | 17 | 5 | 21 | 8 | 38 | 9 | | | | | | |
| 3 | 5 | 62 | 3 | 16 | 0 | 1 | 1 | 1 | 1 | 1 | 8 | 4 | 14 | 6 | 22 | 7 | | | | | | |
| 3 | 12 | 62 | 3 | 23 | - | - | - | - | - | - | 43 | 7 | 30 | 8 | 73 | 11 | | | | | | |
| 3 | 26 | 62 | 3 | 26 | - | - | - | - | - | - | 200 | 17 | 30 | 5 | 230 | 18 | | | | | | |
| 4 | 2 | 62 | 4 | 13 | 9 | 6 | 0 | 1 | 9 | 6 | 95 | 15 | 35 | 6 | 130 | 16 | | | | | | |
| 4 | 9 | 62 | 4 | 24 | - | - | - | - | - | - | 46 | 12 | 58 | 14 | 104 | 18 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 34 | 8 | 18 | 7 | 52 | 11 | | | | | | |
| 4 | 23 | 62 | 5 | 22 | - | - | - | - | - | - | 19 | 7 | 34 | 9 | 53 | 12 | | | | | | |
| 4 | 30 | 62 | 6 | 1 | - | - | - | - | - | - | 15 | 6 | 25 | 7 | 40 | 9 | | | | | | |
| 5 | 7 | 62 | 6 | 8 | 0 | 1 | 1 | 1 | 1 | 1 | 25 | 6 | 19 | 7 | 44 | 9 | | | | | | |
| 5 | 14 | 62 | 7 | 25 | - | - | - | - | - | - | 45 | 8 | 65 | 9 | 110 | 12 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | - | - | - | - | - | - | 22 | 7 | 35 | 8 | 57 | 11 | | | | | | |
| 5 | 28 | 62 | 6 | 29 | - | - | - | - | - | - | 56 | 6 | 30 | 4 | 86 | 7 | | | | | | |
| 6 | 4 | 62 | 7 | 3 | 1 | 3 | 0 | 1 | 1 | 3 | 24 | 28 | 34 | 7 | 58 | 29 | | | | | | |
| 6 | 11 | 62 | 7 | 10 | - | - | - | - | - | - | 18 | 7 | 35 | 8 | 53 | 11 | | | | | | |
| 6 | 18 | 62 | 7 | 17 | - | - | - | - | - | - | 3 | 10 | 32 | 8 | 35 | 13 | | | | | | |
| 6 | 25 | 62 | 7 | 18 | - | - | - | - | - | - | 648 | 41 | 75 | 9 | 723 | 42 | | | | | | |
| 7 | 2 | 62 | 7 | 24 | 0 | 0 | 0 | 1 | 0 | 1 | 10 | 6 | 31 | 8 | 41 | 10 | | | | | | |
| 7 | 9 | 62 | 8 | 17 | - | - | - | - | - | - | 0 | 5 | 29 | 8 | 29 | 9 | | | | | | |
| 7 | 16 | 62 | 8 | 14 | - | - | - | - | - | - | 91 | 13 | 50 | 8 | 141 | 15 | | | | | | |
| 7 | 23 | 62 | 8 | 15 | - | - | - | - | - | - | 14 | 7 | 32 | 9 | 46 | 11 | | | | | | |
| 7 | 30 | 62 | 8 | 22 | - | - | - | - | - | - | 31 | 7 | 34 | 7 | 65 | 10 | | | | | | |
| 8 | 6 | 62 | 8 | 28 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 5 | 25 | 8 | 31 | 9 | | | | | | |
| 8 | 13 | 62 | 8 | 30 | - | - | - | - | - | - | 5 | 27 | 6 | 5 | 11 | 27 | | | | | | |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** UPPER MISSISSIPPI RIVER

**MINOR BASIN** MISSISSIPPI-DES MOINES-SKUNK RIVERS

**STATION LOCATION** MISSISSIPPI RIVER AT
BURLINGTON, IOWA 25

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 20 | 62 | 9 | 5 | - | - | - | - | - | - | 6 | 5 | 33 | 9 | 39 | 10 | | | | | | |
| 8 | 27 | 62 | 9 | 14 | - | - | - | - | - | - | 8 | 13 | 21 | 10 | 29 | 16 | | | | | | |
| 9 | 4 | 62 | 9 | 21 | 0 | 1 | 2 | 1 | 2 | 1 | 7 | 7 | 28 | 9 | 35 | 11 | | | | | | |
| 9 | 10 | 62 | 10 | 9 | - | - | - | - | - | - | 37 | 13 | 33 | 8 | 70 | 15 | | | | | | |
| 9 | 17 | 62 | 10 | 10 | - | - | - | - | - | - | 15 | 12 | 27 | 8 | 42 | 14 | | | | | | |
| 9 | 24 | 62 | 10 | 18 | - | - | - | - | - | - | 18 | 7 | 25 | 8 | 43 | 11 | | | | | | |

**STATION LOCATION** MISSISSIPPI RIVER AT

BURLINGTON, IOWA 25

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 2700 | 160 | 0 | 1970 | 0 | 20 | 0 | 90 | 470 | 200 | 600 | 38 | 7 | 87 | 1 | 78 | 1 | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 5500 | 20 | 0 | 370 | 0 | 190 | 20 | 4390 | 520 | 1430 | 170 | 71 | 5 | 69 | 3 | 68 | 2 | 92 | 1 | 87 | 1 | 38 | 1 | | | | | | | | |
| 11 | 6 | 61 | 5900 | 0 | 0 | 170 | 0 | 100 | 0 | 4760 | 830 | 700 | 660 | 71 | 5 | 69 | 3 | 92 | 1 | 68 | 1 | 38 | 1 | | | | | | | | | | |
| 11 | 20 | 61 | 1600 | 0 | 40 | 20 | 0 | 0 | 0 | 1300 | 250 | 310 | 60 | 71 | 7 | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 6000 | 20 | 110 | 430 | 0 | 230 | 20 | 4910 | 270 | 1460 | 320 | 71 | 5 | 69 | 1 | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 9100 | 0 | 50 | 450 | 0 | 220 | 160 | 8130 | 130 | 800 | 90 | 71 | 6 | 60 | 1 | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 2700 | 110 | 0 | 50 | 0 | 270 | 50 | 2180 | 0 | 70 | 0 | 71 | 4 | 51 | 1 | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 400 | 0 | 0 | 0 | 0 | 40 | 40 | 270 | 20 | 40 | 0 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 700 | 0 | 0 | 20 | 0 | 20 | 20 | 270 | 340 | 70 | 510 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 1800 | 0 | 0 | 20 | 0 | 70 | 160 | 1450 | 70 | 0 | 20 | 71 | 4 | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 1000 | 110 | 20 | 20 | 0 | 380 | 130 | 340 | 20 | 70 | 20 | 71 | 2 | 51 | 1 | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 500 | 0 | 0 | 20 | 0 | 40 | 0 | 250 | 210 | 100 | 120 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 2600 | 0 | 0 | 20 | 0 | 60 | 20 | 1450 | 1010 | 600 | 210 | 69 | 3 | 71 | 3 | 84 | 2 | 88 | 1 | | | | | | | | | | | | |
| 4 | 16 | 62 | 8900 | 2750 | 0 | 410 | 0 | 90 | 50 | 5110 | 470 | 2080 | 630 | 71 | 5 | 2 | 5 | 69 | 2 | 68 | 2 | | | | | | | | | | | | |
| 5 | 7 | 62 | 33500 | 40 | 0 | 2360 | * | 500 | 170 | 26410 | 2570 | 7830 | 120 | 71 | 8 | 69 | 4 | 50 | 4 | 92 | 4 | 25 | 3 | 38 | 3 | 71 | 2 | 68 | 2 | 51 | 2 | 24 | 2 |
| 5 | 21 | 62 | 23700 | 120 | 170 | 2400 | 950 | 410 | 80 | 13830 | 5710 | 4800 | 620 | 69 | 4 | 77 | 4 | 50 | 3 | 24 | 3 | 38 | 3 | 25 | 2 | 51 | 1 | 16 | 1 | 32 | 1 | | |
| 6 | 4 | 62 | 3300 | 0 | 40 | 220 | 0 | 70 | 130 | 2480 | 310 | 1540 | 360 | 71 | 5 | | | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 9400 | 170 | 0 | 870 | 660 | 250 | 170 | 6330 | 990 | 2240 | 120 | 71 | 5 | 69 | 4 | 50 | 3 | 88 | 2 | 68 | 2 | 51 | 1 | 25 | 1 | 91 | 1 | 3 | 1 | | |
| 7 | 2 | 62 | 5600 | 230 | 0 | 700 | 60 | 410 | 190 | 3460 | 540 | 1990 | 350 | 71 | 4 | 69 | 3 | 68 | 2 | 51 | 2 | 92 | 1 | 3 | 1 | | | | | | | | |
| 7 | 16 | 62 | 7600 | 40 | 0 | 0 | 80 | 110 | 0 | 6120 | 1250 | 3250 | 590 | 71 | 5 | 68 | 4 | 69 | 4 | 86 | 3 | 88 | 2 | 67 | 1 | 38 | 1 | | | | | | |
| 8 | 6 | 62 | 4000 | 250 | 0 | 720 | 100 | 460 | 20 | 2240 | 250 | 1740 | 120 | 68 | 3 | 69 | 3 | 71 | 2 | 35 | 1 | 38 | 1 | 51 | 1 | 25 | 1 | 92 | 1 | | | | |
| 8 | 20 | 62 | 7500 | 230 | 0 | 790 | 80 | 520 | 60 | 4580 | 1200 | 1280 | 120 | 68 | 4 | 71 | 4 | 88 | 3 | 69 | 2 | 51 | 2 | 92 | 2 | 35 | 1 | 38 | 1 | 24 | 1 | | |
| 9 | 4 | 62 | 7900 | 440 | 40 | 930 | 0 | 600 | 120 | 4430 | 1330 | 1900 | 660 | 71 | 4 | 68 | 3 | 92 | 3 | 38 | 2 | 51 | 2 | 5 | 1 | 88 | 1 | 24 | 1 | | | | |
| 9 | 17 | 62 | 7500 | 270 | 0 | 640 | 140 | 210 | 40 | 5420 | 790 | 2070 | 210 | 68 | 5 | 71 | 4 | 69 | 4 | 92 | 2 | 38 | 2 | 51 | 1 | | | | | | | | |
| *5 | 7 | 62 | | | | | 1490 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 56 | 57 | 58 | 36 | 26 | 4 | 83 | 2 | 1 | 20 | 0 | 14 | 11 | 1 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 56 | 60 | 83 | 21 | 58 | 12 | 45 | 3 | 4 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 56 | 56 | 83 | 16 | 58 | 10 | 92 | 2 | 16 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 82 | 35 | 80 | 26 | 26 | 6 | 83 | 3 | 30 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 80 | 74 | 56 | 12 | 83 | 4 | 82 | 2 | 8 | 180 | 0 | 12 | 2 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 80 | 90 | 82 | 2 | 57 | 2 | 89 | 2 | 4 | 0 | 20 | 65 | 21 | 4 | 11 | 2 | | | | | | | 2 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 80 | 63 | 82 | 15 | 89 | 8 | 56 | 4 | 10 | 90 | 20 | 53 | 21 | 3 | 2 | 2 | 11 | 1 | | | | | 3 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 80 | 36 | 82 | 27 | 56 | 6 | 9 | 5 | 26 | 0 | 10 | 59 | 2 | 3 | 11 | 2 | 21 | 1 | 17 | 1 | | | 4 | 50 | 1 | | | | | 0 | 1 |
| 2 | 5 | 62 | 71 | 47 | 92 | 6 | 86 | 6 | 72 | 6 | 35 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 82 | 52 | 80 | 13 | 56 | 4 | 88 | 4 | 27 | 0 | 10 | 6 | | | | | | | | | | | 2 | | | | | | | 1 | 0 |
| 3 | 5 | 62 | 82 | 44 | 51 | 8 | 56 | 6 | 92 | 6 | 36 | 40 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 80 | 31 | 83 | 9 | 71 | 8 | 26 | 7 | 45 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 56 | 33 | 47 | 22 | 80 | 11 | 71 | 8 | 26 | 40 | 0 | 1 | | | | | | | | | | | 2 | | | | | | | 1 | 0 |
| 4 | 16 | 62 | 56 | 35 | 80 | 23 | 83 | 16 | 58 | 5 | 21 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 82 | 50 | 56 | 34 | 92 | 7 | 80 | 3 | 6 | 0 | 0 | 215 | 2 | 5 | 11 | 3 | 46 | 2 | 21 | 2 | | | 16 | 76 | 2 | 50 | 1 | | | 0 | 0 |
| 5 | 21 | 62 | 56 | 57 | 58 | 14 | 80 | 14 | 45 | 4 | 11 | 0 | 0 | 204 | 2 | 5 | 11 | 4 | | | | | | | 61 | 76 | 4 | 51 | 4 | 50 | 1 | 0 | 1 |
| 6 | 4 | 62 | 80 | 43 | 56 | 38 | 58 | 5 | 61 | 4 | 10 | 0 | 0 | 57 | 2 | 3 | 11 | 2 | 22 | 1 | | | | | 11 | 76 | 1 | | | | | 0 | 0 |
| 6 | 18 | 62 | 56 | 49 | 80 | 15 | 58 | 10 | 82 | 8 | 18 | 40 | 0 | 101 | 22 | 4 | 11 | 3 | 2 | 2 | 17 | 1 | 18 | 1 | 2 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 80 | 42 | 56 | 27 | 26 | 13 | 58 | 11 | 7 | 20 | 0 | 33 | 11 | 3 | | | | | | | | | 4 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 56 | 38 | 58 | 25 | 26 | 9 | 53 | 8 | 20 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 26 | 36 | 58 | 21 | 56 | 18 | 80 | 7 | 18 | 0 | 10 | 138 | 11 | 4 | 22 | 3 | 18 | 3 | 2 | 2 | 17 | 1 | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 26 | 34 | 82 | 23 | 58 | 14 | 56 | 8 | 21 | 0 | 0 | 418 | 11 | 6 | 17 | 4 | 2 | 4 | 22 | 4 | 16 | 2 | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 58 | 40 | 56 | 23 | 26 | 10 | 82 | 9 | 18 | 0 | 0 | 189 | 11 | 5 | 17 | 3 | 22 | 3 | 2 | 3 | 15 | 1 | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 56 | 25 | 26 | 25 | 58 | 20 | 82 | 17 | 13 | 0 | 0 | 52 | 11 | 3 | 2 | 1 | 15 | 1 | | | | | 0 | | | | | | | 0 | 0 |

## RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

**STATION LOCATION** MISSISSIPPI RIVER AT
BURLINGTON, IOWA

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLOROFORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGENATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 2 | 61 | 10 | 9 | 4830 | 137 | 38 | 99 | 1 | 9 | 12 | 1 | 1 | 9 | 1 | 5 | 2 | 1 | 8 |
| 11 | 6 | 61 | 11 | 14 | 5005 | 130 | 34 | 96 | 0 | 9 | 11 | 2 | 1 | 6 | 2 | 4 | 2 | 1 | 7 |
| 12 | 4 | 61 | 12 | 12 | 5000 | 142 | 30 | 112 | 1 | 8 | 10 | 1 | 1 | 8 | 0 | 3 | 1 | 1 | 6 |
| 1 | 1 | 62 | 1 | 8 | 4860 | 175 | 46 | 129 | 0 | 14 | 11 | 1 | 1 | 9 | 0 | 5 | 3 | 1 | 12 |
| 2 | 5 | 62 | 2 | 14 | 5000 | 210 | 57 | 153 | 2 | 14 | 16 | 1 | 1 | 12 | 2 | 6 | 5 | 2 | 12 |
| 3 | 5 | 62 | 3 | 13 | 4980 | 200 | 62 | 138 | 7 | 13 | 16 | 1 | 2 | 11 | 2 | 6 | 6 | 1 | 13 |
| 4 | 2 | 62 | 4 | 9 | 5000 | 140 | 48 | 92 | 1 | 11 | 17 | 1 | 1 | 13 | 2 | 7 | 4 | 1 | 7 |
| 5 | 7 | 62 | 5 | 16 | 5000 | 155 | 77 | 78 | 2 | 23 | 19 | 2 | 1 | 15 | 1 | 8 | 8 | 2 | 15 |
| 6 | 5 | 62 | 6 | 12 | 5000 | 137 | 59 | 78 | 1 | 15 | 15 | 1 | 1 | 12 | 1 | 7 | 6 | 1 | 14 |
| 7 | 2 | 62 | 7 | 9 | 5010 | 119 | 40 | 79 | 1 | 11 | 10 | 1 | 1 | 7 | 1 | 4 | 4 | 1 | 9 |
| 8 | 6 | 62 | 8 | 16 | 4840 | 156 | 48 | 108 | 1 | 11 | 14 | 2 | 1 | 10 | 1 | 5 | 3 | 1 | 13 |
| 9 | 3 | 62 | 9 | 11 | 2900 | 251 | 45 | 206 | 1 | 12 | 17 | 1 | 1 | 14 | 1 | 6 | 3 | 1 | 5 |

NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE IOWA

MAJOR BASIN UPPER MISSISSIPPI RIVER

MINOR BASIN MISSISSIPPI-DES MOINES SKUNK RIVERS

STATION LOCATION MISSISSIPPI RIVER AT
BURLINGTON, IOWA 25

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 9 | 61 | - | - | - | - | 40 | - | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 14 | 61 | - | - | - | - | 27 | - | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 13 | 61 | - | - | - | - | 18 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 8 | 62 | - | - | - | - | 16 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 15 | 62 | - | - | - | - | 16 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 13 | 62 | - | - | - | - | 19 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 12 | 62 | - | - | - | - | 24 | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 12 | 62 | - | - | - | - | 26 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 16 | 62 | - | - | - | - | 20 | - | - | - | - | - | - | - | - | - | - | - | - |

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Keokuk, Iowa
Operated by U.S. Geological Survey

MINOR BASIN Mississippi-Des Moines-Skunk Rivers

STATION LOCATION Mississippi River at
Burlington, Iowa

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 47.700 | 83.700 | 70.200 | 41.100 | 36.300 | 39.000 | 191.000 | 138.000 | 142.000 | 59.200 | 71.700 | 49.200 |
| 2 | 59.000 | 84.600 | 70.700 | 42.300 | 36.200 | 38.200 | 202.000 | 132.000 | 150.000 | 57.200 | 71.600 | 58.000 |
| 3 | 68.300 | 93.500 | 65.800 | 42.200 | 36.000 | 37.600 | 207.000 | 128.000 | 142.000 | 59.000 | 67.200 | 61.200 |
| 4 | 59.700 | 119.000 | 66.900 | 41.900 | 35.800 | 36.100 | 210.000 | 124.000 | 135.000 | 69.000 | 64.800 | 61.200 |
| 5 | 57.900 | 132.000 | 67.300 | 41.800 | 40.500 | 37.900 | 214.000 | 117.000 | 127.000 | 75.600 | 62.000 | 69.600 |
| 6 | 60.400 | 137.000 | 64.700 | 41.300 | 49.000 | 38.500 | 221.000 | 119.000 | 129.000 | 71.100 | 60.700 | 70.800 |
| 7 | 55.800 | 126.000 | 62.000 | 45.000 | 46.700 | 38.900 | 224.000 | 116.000 | 130.000 | 61.500 | 60.000 | 74.100 |
| 8 | 48.300 | 104.000 | 57.600 | 46.400 | 45.400 | 39.400 | 222.000 | 122.000 | 131.000 | 62.000 | 59.100 | 74.000 |
| 9 | 46.300 | 90.600 | 56.400 | 46.900 | 42.900 | 39.700 | 214.000 | 134.000 | 133.000 | 61.800 | 57.300 | 71.700 |
| 10 | 48.000 | 90.200 | 56.500 | 46.500 | 40.600 | 39.400 | 206.000 | 138.000 | 132.000 | 58.800 | 53.900 | 73.400 |
| 11 | 42.000 | 90.600 | 51.400 | 42.300 | 37.600 | 49.800 | 196.000 | 135.000 | 136.000 | 59.700 | 49.700 | 78.900 |
| 12 | 46.500 | 89.700 | 43.600 | 41.900 | 39.300 | 72.000 | 187.000 | 137.000 | 133.000 | 63.000 | 45.500 | 72.000 |
| 13 | 49.100 | 88.000 | 27.600 | 40.300 | 40.400 | 80.500 | 182.000 | 134.000 | 130.000 | 61.100 | 46.700 | 64.500 |
| 14 | 53.800 | 83.000 | 28.000 | 37.400 | 43.600 | 81.800 | 178.000 | 132.000 | 126.000 | 66.600 | 45.600 | 62.600 |
| 15 | 59.400 | 76.500 | 34.700 | 39.400 | 48.400 | 81.800 | 177.000 | 130.000 | 118.000 | 79.000 | 45.100 | 63.200 |
| 16 | 69.500 | 92.000 | 34.100 | 39.500 | 51.200 | 79.400 | 175.000 | 128.000 | 112.000 | 84.500 | 46.000 | 65.000 |
| 17 | 57.100 | 122.000 | 37.000 | 38.000 | 52.400 | 81.300 | 176.000 | 124.000 | 106.000 | 85.700 | 45.700 | 64.000 |
| 18 | 45.200 | 142.000 | 39.400 | 37.300 | 50.200 | 83.000 | 178.000 | 114.000 | 100.000 | 74.500 | 45.300 | 63.000 |
| 19 | 43.100 | 153.000 | 42.100 | 36.800 | 47.400 | 103.000 | 180.000 | 108.000 | 94.600 | 74.000 | 44.500 | 64.300 |
| 20 | 45.200 | 147.000 | 42.300 | 35.800 | 45.400 | 120.000 | 180.000 | 106.000 | 91.200 | 78.000 | 45.200 | 64.900 |
| 21 | 44.900 | 133.000 | 47.400 | 35.500 | 44.900 | 160.000 | 180.000 | 102.000 | 85.700 | 78.000 | 42.700 | 64.000 |
| 22 | 49.900 | 118.000 | 51.800 | 34.500 | 43.100 | 178.000 | 182.000 | 99.300 | 79.800 | 83.300 | 41.800 | 62.700 |
| 23 | 49.600 | 108.000 | 52.000 | 34.400 | 43.800 | 197.000 | 180.000 | 96.100 | 74.800 | 91.900 | 40.100 | 62.900 |
| 24 | 48.000 | 104.000 | 54.500 | 33.700 | 43.000 | 195.000 | 176.000 | 98.700 | 75.200 | 92.500 | 36.800 | 64.500 |
| 25 | 45.700 | 101.000 | 54.500 | 34.300 | 41.200 | 180.000 | 173.000 | 106.000 | 79.000 | 90.200 | 35.500 | 67.200 |
| 26 | 43.300 | 97.300 | 52.900 | 34.400 | 40.900 | 170.000 | 168.000 | 109.000 | 77.000 | 84.300 | 40.200 | 62.800 |
| 27 | 41.700 | 90.100 | 52.500 | 35.400 | 40.300 | 167.000 | 161.000 | 110.000 | 71.000 | 81.400 | 47.500 | 62.600 |
| 28 | 41.000 | 82.500 | 51.800 | 36.100 | 40.000 | 167.000 | 156.000 | 104.000 | 65.600 | 81.500 | 54.300 | 55.000 |
| 29 | 45.000 | 72.900 | 50.800 | 37.200 |  | 172.000 | 149.000 | 104.000 | 63.600 | 77.700 | 47.800 | 46.500 |
| 30 | 60.200 | 73.800 | 46.500 | 36.300 |  | 175.000 | 141.000 | 116.000 | 62.500 | 74.200 | 40.300 | 42.300 |
| 31 | 75.800 |  | 44.100 | 36.400 |  | 179.000 |  | 127.000 |  | 76.500 | 41.200 |  |

**MAJOR BASIN** UPPER MISSISSIPPI RIVER

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** MISSISSIPPI-WAPSIPINICON & TRIB.

**STATION LOCATION** MISSISSIPPI RIVER AT
DUBUQUE, IOWA 26

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 23 | 61 | 11 | 2 | - | - | - | - | - | - | 4 | 5 | 19 | 7 | 23 | 9 | | | | | | |
| 10 | 31 | 61 | 11 | 9 | - | - | - | - | - | - | 27 | 8 | 27 | 7 | 54 | 11 | | | | | | |
| 11 | 20 | 61 | 12 | 4 | - | - | - | - | - | - | 31 | 6 | 36 | 7 | 67 | 9 | | | | | | |
| 12 | 4 | 61 | 12 | 18 | - | - | - | - | - | - | 14 | 6 | 25 | 7 | 39 | 9 | | | | | | |
| 12 | 26 | 61 | 1 | 9 | 0 | 0 | 2 | 1 | 2 | 1 | 6 | 4 | 19 | 6 | 25 | 7 | | | | | | |
| 1 | 2 | 62 | 1 | 12 | - | - | - | - | - | - | 0 | 5 | 27 | 7 | 27 | 9 | | | | | | |
| 1 | 16 | 62 | 1 | 29 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 4 | 13 | 6 | 18 | 7 | | | | | | |
| 1 | 22 | 62 | 1 | 31 | - | - | - | - | - | - | 1 | 5 | 6 | 7 | 7 | 9 | | | | | | |
| 2 | 19 | 62 | 3 | 5 | 0 | 1 | 1 | 1 | 1 | 1 | 7 | 4 | 17 | 6 | 24 | 7 | | | | | | |
| 3 | 5 | 62 | 3 | 16 | - | - | - | - | - | - | 13 | 4 | 25 | 6 | 38 | 7 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | 0 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 19 | 6 | 22 | 7 | | | | | | |
| 3 | 19 | 62 | 4 | 4 | - | - | - | - | - | - | 17 | 6 | 27 | 8 | 44 | 10 | | | | | | |
| 3 | 26 | 62 | 4 | 9 | - | - | - | - | - | - | 75 | 7 | 38 | 6 | 113 | 9 | | | | | | |
| 4 | 2 | 62 | 4 | 16 | - | - | - | - | - | - | 58 | 7 | 27 | 5 | 85 | 9 | | | | | | |
| 4 | 9 | 62 | 4 | 23 | 2 | 2 | 0 | 0 | 2 | 2 | 31 | 10 | 17 | 5 | 48 | 11 | | | | | | |
| 4 | 23 | 62 | 5 | 22 | - | - | - | - | - | - | 14 | 8 | 28 | 9 | 42 | 12 | | | | | | |
| 5 | 7 | 62 | 6 | 18 | - | - | - | - | - | - | 80 | 16 | 41 | 7 | 121 | 17 | | | | | | |
| 5 | 14 | 62 | 6 | 19 | 0 | 1 | 1 | 2 | 1 | 2 | 26 | 6 | 48 | 8 | 74 | 10 | | | | | | |
| 5 | 21 | 62 | 6 | 27 | - | - | - | - | - | - | 9 | 6 | 26 | 8 | 35 | 10 | | | | | | |
| 5 | 29 | 62 | 7 | 2 | - | - | - | - | - | - | 53 | 16 | 37 | 8 | 90 | 18 | | | | | | |
| 6 | 4 | 62 | 6 | 4 | - | - | - | - | - | - | 4 | 5 | 38 | 8 | 42 | 9 | | | | | | |
| 6 | 25 | 62 | 7 | 31 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 6 | 37 | 9 | 38 | 11 | | | | | | |
| 9 | 18 | 62 | 10 | 10 | 0 | 1 | 1 | 1 | 1 | 1 | 10 | 6 | 21 | 8 | 31 | 10 | | | | | | |

**MINOR BASIN** MISSISSIPPI-WAPSIPINICON & TRIB.

**STATION LOCATION** MISSISSIPPI RIVER AT

DUBUQUE, IOWA 26

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 23 | 61 | 9100 | 20 | 250 | 330 | 0 | 130 | 20 | 7850 | 520 | 890 | 100 | 71 | 6 | 69 | 4 | 87 | 1 | 12 | 1 | | | | | | | | | | | | |
| 10 | 31 | 61 | 6700 | 0 | 270 | 430 | 0 | 360 | 130 | 5360 | 180 | 1230 | 90 | 71 | 6 | 57 | 1 | 12 | 1 | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 8100 | 160 | 270 | 1080 | 0 | 500 | 180 | 5420 | 500 | 2720 | 340 | 71 | 5 | 69 | 3 | 57 | 2 | 35 | 1 | 38 | 1 | 2 | 1 | 60 | 1 | 51 | 1 | 24 | 1 | | |
| 12 | 4 | 61 | 3800 | 0 | 160 | 360 | 0 | 520 | 200 | 2410 | 160 | 2030 | 140 | 71 | 4 | 51 | 1 | 57 | 1 | 63 | 1 | | | | | | | | | | | | |
| 12 | 26 | 61 | 500 | 20 | 0 | 20 | 0 | 20 | 0 | 390 | 20 | 230 | 0 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 900 | 20 | 0 | 70 | 0 | 140 | 0 | 410 | 230 | 340 | 0 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 1 | 16 | 62 | 200 | 0 | 0 | 0 | 0 | 40 | 0 | 80 | 40 | 40 | 0 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 2600 | 0 | 0 | 0 | 0 | 90 | 50 | 2400 | 90 | 70 | 0 | 71 | 4 | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 70 | 90 | 50 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 300 | 0 | 0 | 20 | 0 | 0 | 0 | 70 | 200 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 400 | 20 | 0 | 20 | 0 | 0 | 0 | 230 | 80 | 60 | 0 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 2200 | 0 | 20 | 20 | 0 | 40 | 0 | 1300 | 790 | 370 | 80 | 69 | 3 | 71 | 2 | 88 | 1 | 92 | 1 | | | | | | | | | | | | |
| 4 | 16 | 62 | 7900 | 50 | 0 | 230 | 0 | 140 | 410 | 6240 | 830 | 2710 | 920 | 71 | 6 | 69 | 3 | 65 | 2 | 68 | 1 | 88 | 1 | 92 | 1 | | | | | | | | |
| 5 | 7 | 62 | 19600 | 0 | 0 | 720 | 170 | 40 | 0 | 16210 | 2470 | 2700 | 970 | 71 | 7 | 92 | 3 | 69 | 3 | 38 | 2 | 93 | 2 | 77 | 2 | 88 | 1 | 50 | 1 | | | | |
| 5 | 21 | 62 | 19800 | 630 | 510 | 2490 | 340 | 760 | 0 | 11440 | 3630 | 3930 | 1390 | 71 | 6 | 69 | 5 | 82 | 4 | 38 | 3 | 87 | 3 | 57 | 3 | 2 | 2 | 92 | 2 | 17 | 2 | 34 | 2 |
| 6 | 4 | 62 | 7100 | 60 | 40 | 350 | 40 | 310 | 100 | 5130 | 1080 | 540 | 170 | 71 | 5 | 69 | 4 | 88 | 2 | 77 | 2 | 51 | 1 | | | | | | | | | | |
| 6 | 25 | 62 | 18900 | 580 | 80 | 1990 | * | 1700 | 110 | 10390 | 1200 | 1530 | 370 | 71 | 6 | 50 | 5 | 51 | 4 | 69 | 3 | 68 | 3 | 92 | 3 | 40 | 2 | 38 | 2 | 3 | 1 | 30 | 1 |
| 7 | 2 | 62 | 2200 | 20 | 50 | 450 | 20 | 50 | 50 | 1470 | 110 | 630 | 110 | 71 | 3 | 69 | 2 | | | | | | | | | | | | | | | | |
| 7 | 23 | 62 | 3000 | 80 | 0 | 490 | 130 | 0 | 40 | 1560 | 720 | 1060 | 630 | 71 | 3 | 69 | 2 | 88 | 2 | 40 | 1 | 68 | 1 | 38 | 1 | | | | | | | | |
| 8 | 6 | 62 | 3700 | 110 | 0 | 410 | 210 | 420 | 120 | 1680 | 790 | 620 | 370 | 68 | 3 | 69 | 2 | 88 | 1 | 92 | 1 | 51 | 1 | 50 | 1 | 87 | 1 | 38 | 1 | | | | |
| 8 | 20 | 62 | 4700 | 60 | 500 | 290 | 60 | 190 | 120 | 3400 | 120 | 580 | 120 | 71 | 4 | 69 | 4 | 12 | 2 | 68 | 1 | | | | | | | | | | | | |
| 9 | 4 | 62 | 4400 | 0 | 0 | 530 | 0 | 80 | 0 | 2410 | 1390 | 1770 | 970 | 71 | 3 | 69 | 3 | 87 | 2 | 68 | 2 | 92 | 1 | 40 | 1 | 88 | 1 | 79 | 1 | | | | |
| 9 | 18 | 62 | 1000 | 10 | 40 | 210 | 0 | 30 | 0 | 620 | 80 | 640 | 200 | 71 | 2 | 68 | 1 | | | | | | | | | | | | | | | | |
| *6 | 25 | 62 | | | | | 2860 | | | | | | | | | | | | | | | | | | | | | | | | | | |

# PLANKTON POPULATION

**MAJOR BASIN** UPPER MISSISSIPPI RIVER

**MINOR BASIN** MISSISSIPPI-WAPSIPINICON & TRIB.

**STATION LOCATION** MISSISSIPPI RIVER AT

DUBUQUE, IOWA 026

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 23 | 61 | 56 | 46 | 83 | 24 | 82 | 12 | 80 | 11 | 7 | 20 | 0 | 369 | 11 | 6 | 2 | 5 | 17 | 3 | 21 | 1 | | | 9 | 51 | 1 | | | | | 0 | 0 |
| 10 | 31 | 61 | 56 | 45 | 83 | 33 | 80 | 12 | 58 | 3 | 7 | 0 | 0 | 305 | 11 | 6 | 17 | 4 | | | | | | | 7 | 77 | 1 | | | | | 0 | 0 |
| 11 | 20 | 61 | 80 | 56 | 56 | 28 | 83 | 7 | 82 | 3 | 6 | 90 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 80 | 49 | 89 | 3 | 56 | 3 | 82 | 2 | 43 | 50 | 0 | 60 | 11 | 3 | 21 | 2 | 17 | 1 | | | | | 9 | 50 | 1 | 76 | 1 | | | 0 | 0 |
| 12 | 26 | 61 | 80 | 51 | 82 | 15 | 56 | 5 | 92 | 4 | 25 | 0 | 0 | 38 | 21 | 2 | 11 | 2 | 2 | 1 | | | | | 2 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 80 | 54 | 82 | 15 | 56 | 6 | 9 | 5 | 20 | 20 | 20 | 82 | 2 | 4 | 11 | 2 | 21 | 2 | | | | | 3 | | | | | | | 0 | 0 |
| 1 | 16 | 62 | 80 | 28 | 56 | 17 | 82 | 12 | 89 | 7 | 36 | 0 | 0 | 18 | 2 | 1 | 11 | 1 | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 82 | 42 | 46 | 4 | 56 | 3 | 89 | 3 | 45 | 2260 | 10 | 13 | 11 | 1 | | | | | | | | | 4 | 50 | 1 | | | | | 0 | 0 |
| 3 | 5 | 62 | 80 | 24 | 82 | 23 | 58 | 8 | 56 | 6 | 39 | 0 | 0 | 6 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 71 | 17 | 58 | 15 | 51 | 13 | 56 | 10 | 45 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 82 | 18 | 56 | 15 | 80 | 8 | 51 | 5 | 54 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 56 | 51 | 83 | 16 | 71 | 7 | 92 | 6 | 20 | 20 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 56 | 63 | 83 | 10 | 58 | 4 | 80 | 4 | 19 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 56 | 68 | 92 | 8 | 80 | 7 | 82 | 4 | 13 | 20 | 0 | 149 | 2 | 5 | 11 | 1 | | | | | | | 36 | 50 | 4 | 76 | 3 | | | 2 | 0 |
| 5 | 21 | 62 | 56 | 30 | 80 | 28 | 82 | 13 | 83 | 7 | 22 | 250 | 0 | 1460 | 11 | 8 | 2 | 7 | 17 | 3 | 46 | 6 | 21 | 1 | 114 | 50 | 4 | 51 | 4 | 76 | 4 | 0 | 0 |
| 6 | 4 | 62 | 56 | 39 | 80 | 27 | 83 | 21 | 58 | 9 | 4 | 20 | 10 | 6 | | | | | | | | | | | 4 | | | | | | | 0 | 0 |
| 6 | 25 | 62 | 56 | 41 | 80 | 18 | 82 | 14 | 58 | 13 | 14 | 0 | 10 | 123 | 22 | 4 | 11 | 4 | 17 | 2 | | | | | 58 | 50 | 4 | 76 | 4 | 51 | 2 | 0 | 0 |
| 7 | 2 | 62 | 56 | 55 | 58 | 22 | 80 | 14 | 26 | 1 | 8 | 680 | 0 | 12 | 11 | 1 | | | | | | | | | 11 | 52 | 2 | 76 | 1 | | | 0 | 0 |
| 7 | 23 | 62 | 56 | 42 | 58 | 21 | 80 | 3 | 82 | 3 | 31 | 0 | 0 | 116 | 11 | 3 | 22 | 3 | 2 | 2 | 17 | 2 | 15 | 1 | 6 | 50 | 2 | | | | | 2 | 0 |
| 8 | 6 | 62 | 58 | 40 | 56 | 25 | 80 | 16 | 26 | 7 | 12 | 60 | 0 | 345 | 11 | 5 | 22 | 4 | 17 | 4 | 18 | 2 | 2 | 1 | 12 | 50 | 2 | 76 | 2 | | | 0 | 0 |
| 8 | 20 | 62 | 58 | 50 | 56 | 17 | 80 | 15 | 83 | 5 | 13 | 0 | 0 | 3010 | 11 | 8 | 17 | 8 | 22 | 6 | 2 | 6 | 18 | 6 | 13 | 50 | 3 | | | | | 0 | 0 |
| 9 | 4 | 62 | 58 | 31 | 56 | 20 | 82 | 14 | 26 | 11 | 24 | 0 | 0 | 238 | 11 | 5 | 17 | 4 | 22 | 3 | 2 | 2 | 21 | 1 | 18 | 50 | 3 | 51 | 1 | 76 | 1 | 0 | 0 |
| 9 | 18 | 62 | 56 | 40 | 58 | 27 | 82 | 7 | 26 | 6 | 20 | 0 | 0 | 98 | 17 | 3 | 11 | 3 | 22 | 2 | 21 | 2 | | | 12 | 50 | 2 | 76 | 2 | | | 0 | 0 |

# ORGANIC CHEMICALS
RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**MAJOR BASIN** UPPER MISSISSIPPI RIVER

**MINOR BASIN** MISSISSIPPI-WAPSIPINICON & TRIB.

**STATION LOCATION** MISSISSIPPI RIVER AT
DUBUQUE, IOWA

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 8 | 61 | 10 | 19 | 555 | * | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 19 | 61 | 11 | 26 | 3818 | 186 | 58 | 128 | 2 | 16 | 16 | 1 | 1 | 13 | 1 | 7 | 4 | 1 | 12 |
| 12 | 20 | 61 | 12 | 27 | 5115 | 196 | 66 | 130 | 3 | 18 | 15 | 1 | 1 | 13 | 0 | 8 | 6 | 1 | 15 |
| 1 | 22 | 62 | 1 | 29 | 5595 | 180 | 43 | 137 | 2 | 12 | 11 | 1 | 1 | 8 | 1 | 4 | 3 | 1 | 10 |
| 2 | 15 | 62 | 2 | 22 | 2280 | 445 | 68 | 377 | 3 | 12 | 21 | 3 | 1 | 16 | 1 | 8 | 5 | 1 | 18 |
| 3 | 12 | 62 | 3 | 19 | 4785 | 211 | 76 | 135 | 5 | 18 | 19 | 2 | 1 | 16 | 0 | 9 | 7 | 2 | 16 |
| 4 | 10 | 62 | 4 | 16 | 4012 | 171 | 48 | 123 | 1 | 13 | 18 | 1 | 1 | 15 | 1 | 6 | 5 | 1 | 4 |
| 4 | 30 | 62 | 5 | 7 | 3923 | 211 | 103 | 108 | 4 | 29 | 26 | 2 | 1 | 22 | 1 | 12 | 4 | 2 | 26 |
| 6 | 4 | 62 | 6 | 13 | 2190 | 234 | 101 | 133 | 5 | 30 | 22 | 2 | 1 | 17 | 2 | 10 | 11 | 1 | 22 |
| 7 | 9 | 62 | 7 | 17 | 4065 | 202 | 85 | 117 | 3 | 22 | 21 | 1 | 2 | 17 | 1 | 11 | 9 | 2 | 17 |
| 8 | 6 | 62 | 8 | 13 | 4102 | 188 | 79 | 109 | 2 | 19 | 20 | 1 | 1 | 16 | 2 | 10 | 7 | 2 | 19 |
| 9 | 6 | 62 | 9 | 13 | 4642 | 148 | 57 | 91 | 1 | 18 | 13 | 1 | 1 | 11 | 0 | 7 | 5 | 2 | 11 |

* LOW FLOW - NOT PROCESSED

**MINOR BASIN** MISSISSIPPI-WAPSIPINICON & TRIB.

**STATION LOCATION** MISSISSIPPI RIVER AT

DUBUQUE, IOWA 26

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 23 | 61 | 9.3 | 8.3 | 8.7 | 2.8 | 6 | - | - | - | 10 | 129 | 138 | 100 | 75 | - | - | - | 500 |
| 10 | 31 | 61 | 10.2 | 8.8 | 8.6 | 2.4 | 5 | - | - | - | 10 | 129 | 155 | 100 | 165 | - | - | - | 2400 |
| 11 | 20 | 61 | 4.0 | 10.2 | 8.6 | 2.8 | - | - | - | - | 9 | 117 | 152 | 100 | 180 | - | - | - | - |
| 12 | 4 | 61 | 5.0 | 10.8 | 8.3 | 2.2 | 4 | - | - | - | 8 | 119 | 169 | 100 | 160 | 28 | .1 | - | 220 |
| 1 | 2 | 61 | .5 | 10.6 | 7.6 | 1.8 | 3 | - | - | - | 8 | 165 | 185 | 100 | 25 | 31 | .0 | - | 480 |
| 1 | 16 | 62 | - | - | - | - | - | - | - | - | 7 | - | - | - | - | - | - | - | - |
| 1 | 22 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 34 | .0 | - | 4 |
| 2 | 19 | 62 | .9 | 13.8 | 7.8 | 3.4 | 7 | - | - | - | 8 | 134 | 196 | 20 | 25 | - | - | - | 240 |
| 3 | 5 | 62 | 1.2 | 13.2 | 7.6 | 3.1 | 6 | - | - | - | 9 | 120 | 169 | 20 | 25 | - | - | - | 190 |
| 3 | 12 | 62 | 1.0 | 13.6 | 7.7 | 3.3 | 6 | - | - | - | 9 | 118 | 189 | 20 | 25 | - | - | - | - |
| 3 | 19 | 62 | 1.1 | 8.0 | 7.5 | 3.5 | 7 | - | - | - | 8 | 115 | 154 | 50 | 25 | - | - | - | 520 |
| 3 | 26 | 62 | 2.8 | 9.3 | 7.8 | 4.2 | 6 | - | - | - | 10 | 91 | 121 | 20 | 200 | - | - | - | 300 |
| 4 | 2 | 62 | 2.9 | 9.2 | 7.6 | 4.6 | 6 | - | - | - | 8 | 90 | 127 | 20 | 210 | - | - | - | 560 |
| 4 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 600 |
| 4 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 50 |
| 4 | 23 | 62 | 11.0 | 9.0 | 8.4 | 5.1 | 9 | - | - | - | 9 | 118 | 125 | 20 | 200 | 37 | .0 | - | 90 |
| 5 | 7 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *50 |
| 5 | 14 | 62 | 18.8 | 7.4 | 8.2 | 3.5 | 8 | - | - | - | 8 | 110 | 138 | 150 | 75 | - | - | - | - |
| 5 | 21 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 42 | - | - | - |
| 5 | 28 | 62 | 19.4 | 8.2 | 8.3 | 3.4 | 8 | - | - | - | 8 | 108 | 125 | 125 | 75 | - | - | - | - |
| 5 | 29 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 39 | .0 | - | - |
| 6 | 4 | 62 | 20.0 | 7.9 | 8.2 | 3.0 | 7 | - | - | - | 9 | 102 | 122 | 100 | 75 | - | - | - | 500 |
| 6 | 25 | 62 | 21.0 | 6.2 | 8.2 | 3.0 | 5 | - | - | - | 8 | 124 | 136 | 25 | 50 | - | - | - | 150 |
| 7 | 2 | 62 | 21.2 | 6.0 | 8.1 | 3.3 | 6 | - | - | - | 8 | 120 | 134 | 25 | 40 | - | - | - | 370 |
| 7 | 23 | 62 | 24.0 | 5.0 | 7.9 | 1.8 | 5 | - | - | - | 8 | 154 | 174 | - | 200 | - | - | - | 3400 |
| 8 | 6 | 62 | 25.0 | 5.4 | 8.1 | 2.8 | 5 | - | - | - | 8 | 148 | 198 | 50 | 100 | - | - | - | 880 |
| 9 | 4 | 62 | 21.2 | 6.0 | 8.1 | 3.1 | 7 | - | - | - | 8 | 121 | 145 | 50 | 150 | - | - | - | 1500 |
| 9 | 10 | 62 | 20.6 | 6.2 | 8.1 | 2.6 | 5 | - | - | - | 8 | 158 | 128 | 50 | 100 | - | - | - | - |
| 9 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *40 |

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at McGregor, Iowa
Operated by U.S. Geological Survey

MINOR BASIN Mississippi-Wapsipinicon & Trib.

STATION LOCATION Mississippi River at
Dubuque, Iowa

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16.700 | 18.700 | 18.500 | 13.200 | 12.100 | 14.200 | 84.900 | 71.400 | 85.400 | 34.600 | 36.000 | 55.700 |
| 2 | 15.100 | 22.400 | 18.600 | 14.100 | 12.100 | 14.100 | 84.800 | 69.700 | 88.300 | 36.000 | 33.500 | 56.200 |
| 3 | 12.800 | 27.200 | 18.600 | 15.400 | 12.100 | 14.100 | 82.000 | 66.200 | 90.600 | 35.900 | 33.200 | 55.000 |
| 4 | 12.500 | 26.100 | 18.300 | 14.400 | 12.000 | 14.100 | 80.000 | 65.500 | 93.400 | 30.000 | 34.500 | 51.400 |
| 5 | 12.900 | 24.100 | 16.500 | 14.500 | 12.100 | 15.800 | 78.200 | 64.000 | 95.900 | 28.800 | 35.700 | 47.200 |
| 6 | 13.000 | 23.900 | 16.800 | 14.500 | 12.100 | 15.800 | 77.000 | 62.300 | 94.300 | 29.500 | 36.500 | 47.600 |
| 7 | 14.300 | 25.500 | 16.300 | 14.400 | 12.100 | 16.000 | 77.000 | 62.300 | 93.900 | 33.100 | 32.200 | 47.000 |
| 8 | 13.000 | 26.300 | 15.100 | 14.400 | 12.100 | 16.200 | 79.800 | 62.500 | 90.900 | 37.200 | 26.800 | 44.600 |
| 9 | 13.000 | 24.300 | 12.800 | 13.500 | 12.100 | 16.300 | 82.500 | 54.700 | 87.900 | 39.000 | 27.400 | 41.300 |
| 10 | 13.200 | 25.100 | 9.200 | 13.400 | 12.100 | 16.400 | 83.000 | 52.700 | 84.100 | 38.600 | 26.700 | 38.100 |
| 11 | 16.600 | 25.600 | 6.700 | 12.700 | 12.100 | 16.400 | 86.100 | 50.700 | 81.500 | 37.600 | 25.500 | 38.600 |
| 12 | 20.600 | 24.900 | 11.400 | 12.700 | 12.100 | 17.400 | 87.800 | 49.500 | 77.600 | 38.000 | 24.600 | 39.000 |
| 13 | 19.500 | 20.900 | 11.300 | 12.600 | 12.800 | 18.200 | 89.600 | 49.400 | 73.500 | 38.700 | 23.800 | 39.200 |
| 14 | 18.500 | 17.800 | 11.300 | 12.500 | 12.800 | 17.900 | 93.800 | 48.900 | 70.800 | 40.800 | 26.200 | 38.800 |
| 15 | 15.600 | 16.300 | 11.300 | 12.400 | 13.800 | 18.100 | 96.600 | 49.100 | 65.300 | 41.700 | 29.900 | 38.500 |
| 16 | 14.300 | 18.300 | 12.400 | 11.700 | 13.800 | 18.000 | 100.000 | 49.000 | 61.900 | 40.400 | 29.500 | 39.600 |
| 17 | 14.800 | 20.700 | 14.100 | 11.900 | 13.600 | 18.400 | 103.000 | 49.100 | 59.200 | 38.100 | 29.800 | 43.500 |
| 18 | 14.100 | 20.600 | 19.600 | 11.900 | 13.400 | 17.700 | 104.000 | 49.400 | 58.900 | 38.700 | 28.500 | 44.500 |
| 19 | 15.400 | 20.900 | 18.700 | 12.000 | 13.200 | 17.500 | 104.000 | 54.600 | 57.600 | 39.200 | 26.600 | 45.200 |
| 20 | 17.100 | 19.400 | 15.300 | 12.100 | 13.000 | 18.100 | 104.000 | 59.400 | 55.500 | 41.900 | 24.800 | 45.300 |
| 21 | 16.200 | 15.000 | 15.800 | 12.000 | 12.700 | 18.500 | 101.000 | 60.000 | 48.400 | 44.600 | 22.900 | 45.600 |
| 22 | 14.100 | 14.300 | 15.800 | 12.000 | 12.800 | 21.000 | 98.300 | 61.000 | 46.700 | 44.300 | 20.700 | 45.300 |
| 23 | 14.100 | 18.900 | 15.700 | 12.000 | 12.600 | 21.500 | 94.000 | 62.700 | 45.900 | 45.400 | 21.100 | 45.500 |
| 24 | 14.400 | 20.800 | 15.700 | 12.000 | 12.600 | 23.000 | 89.500 | 62.000 | 44.400 | 44.600 | 29.500 | 41.300 |
| 25 | 14.100 | 19.100 | 15.700 | 12.100 | 12.700 | 25.000 | 84.700 | 61.500 | 44.200 | 43.300 | 35.300 | 33.400 |
| 26 | 14.100 | 17.000 | 15.800 | 12.100 | 13.800 | 28.000 | 81.600 | 63.800 | 43.700 | 41.700 | 33.900 | 29.700 |
| 27 | 14.500 | 15.200 | 15.900 | 12.100 | 14.300 | 35.400 | 79.300 | 67.600 | 40.000 | 39.700 | 28.600 | 27.500 |
| 28 | 14.200 | 14.400 | 16.000 | 12.000 | 14.200 | 43.100 | 77.200 | 68.300 | 36.600 | 38.900 | 21.800 | 26.600 |
| 29 | 15.200 | 15.000 | 13.500 | 12.100 |  | 58.100 | 75.600 | 72.000 | 34.300 | 38.800 | 24.000 | 24.700 |
| 30 | 18.400 | 16.000 | 13.500 | 12.100 |  | 67.400 | 73.300 | 77.500 | 34.100 | 38.700 | 30.700 | 22.300 |
| 31 | 18.400 |  | 13.400 | 12.000 |  | 76.500 |  | 82.500 |  | 38.000 | 45.700 |  |

**NATIONAL WATER QUALITY NETWORK**

## ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*

*(Parts per billion)*

**STATE** MINNESOTA

**MAJOR BASIN** UPPER MISSISSIPPI RIVER

**MINOR BASIN** UPPER PORTION UPPER MISSISSIPPI

**STATION LOCATION** MISSISSIPPI RIVER LOCK DAM #3 BELOW

ST. PAUL, MINNESOTA 27

| DATE OF SAMPLE | | | | | | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | GALLONS FILTERED | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 3 | 61 | 10 | 10 | 3748 | 226 | 41 | 185 | 1 | 10 | 17 | 1 | 1 | 14 | 1 | 5 | 2 | 1 | 5 |
| 11 | 7 | 61 | 11 | 14 | 3324 | 259 | 64 | 195 | 1 | 17 | 23 | 2 | 1 | 14 | 6 | 8 | 4 | 1 | 10 |
| 12 | 5 | 61 | 12 | 12 | 3449 | 264 | 67 | 197 | 1 | 18 | 23 | 1 | 1 | 19 | 2 | 7 | 5 | 1 | 12 |
| 1 | 2 | 62 | 1 | 9 | 3673 | 280 | 85 | 195 | 3 | 20 | 30 | 3 | 2 | 25 | 0 | 11 | 5 | 2 | 14 |
| 2 | 6 | 62 | 2 | 13 | 3978 | 338 | 130 | 208 | 4 | 29 | 48 | 4 | 3 | 39 | 2 | 22 | 9 | 4 | 14 |
| 3 | 6 | 62 | 3 | 13 | 4531 | 245 | 101 | 144 | 3 | 19 | 37 | 2 | 3 | 30 | 2 | 20 | 7 | 2 | 13 |
| 4 | 3 | 62 | 4 | 9 | 3161 | 252 | 114 | 138 | 2 | 29 | 41 | 4 | 3 | 30 | 4 | 17 | 9 | 2 | 14 |
| 5 | 1 | 62 | 5 | 8 | 3811 | 210 | 94 | 116 | 4 | 27 | 28 | 3 | 3 | 21 | 1 | 10 | 8 | 2 | 15 |
| 6 | 5 | 62 | 6 | 12 | 4106 | 179 | 84 | 95 | 6 | 25 | 19 | 2 | 2 | 13 | 2 | 8 | 8 | 2 | 16 |
| 7 | 3 | 62 | 7 | 10 | 3338 | 216 | 86 | 130 | 2 | 21 | 27 | 4 | 3 | 18 | 2 | 9 | 5 | 2 | 20 |
| 8 | 7 | 62 | 8 | 9 | 1807 | 360 | 141 | 219 | 6 | 45 | 28 | 4 | 2 | 22 | 0 | 13 | 13 | 3 | 33 |
| 9 | 4 | 62 | 9 | 11 | 3922 | 159 | 48 | 111 | 1 | 11 | 21 | 2 | 1 | 17 | 1 | 6 | 4 | 1 | 4 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

| | |
|---|---|
| **STATE** | MINNESOTA |
| **MAJOR BASIN** | UPPER MISSISSIPPI RIVER |
| **MINOR BASIN** | UPPER PORTION UPPER MISSISSIPPI |
| **STATION LOCATION** | MISSISSIPPI RIVER LOCK DAM #3 BELOW<br>ST. PAUL, MINNESOTA 27 |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 3 | 61 | 11 | 7 | - | - | - | - | - | - | 1 | 5 | 19 | 8 | 20 | 9 | | | | | | |
| 10 | 10 | 61 | 10 | 30 | - | - | - | - | - | - | 4 | 5 | 28 | 8 | 32 | 9 | | | | | | |
| 10 | 17 | 61 | 11 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 4 | 31 | 6 | 36 | 7 | | | | | | |
| 10 | 24 | 61 | 11 | 2 | - | - | - | - | - | - | 4 | 5 | 25 | 8 | 29 | 9 | | | | | | |
| 10 | 31 | 61 | 11 | 9 | - | - | - | - | - | - | 5 | 5 | 26 | 8 | 31 | 9 | | | | | | |
| 11 | 7 | 61 | 11 | 17 | - | - | - | - | - | - | 17 | 5 | 63 | 8 | 80 | 9 | | | | | | |
| 11 | 14 | 61 | 11 | 24 | - | - | - | - | - | - | 26 | 6 | 69 | 8 | 95 | 10 | | | | | | |
| 11 | 21 | 61 | 11 | 30 | 0 | 1 | 1 | 1 | 1 | 1 | 29 | 5 | 48 | 7 | 77 | 9 | | | | | | |
| 11 | 28 | 61 | 12 | 5 | 0 | 1 | 1 | 2 | 1 | 2 | 11 | 4 | 57 | 7 | 68 | 8 | | | | | | |
| 12 | 5 | 61 | 12 | 14 | - | - | - | - | - | - | 16 | 5 | 38 | 8 | 54 | 9 | | | | | | |
| 12 | 12 | 61 | 12 | 19 | - | - | - | - | - | - | 12 | 4 | 30 | 6 | 42 | 7 | | | | | | |
| 12 | 19 | 61 | 12 | 28 | 0 | 0 | 1 | 1 | 1 | 1 | 15 | 4 | 35 | 6 | 50 | 7 | | | | | | |
| 12 | 28 | 61 | 1 | 5 | - | - | - | - | - | - | 30 | 6 | 21 | 8 | 51 | 10 | | | | | | |
| 1 | 3 | 62 | 1 | 12 | - | - | - | - | - | - | 2 | 5 | 18 | 8 | 20 | 9 | | | | | | |
| 1 | 9 | 62 | 1 | 18 | - | - | - | - | - | - | 10 | 5 | 24 | 8 | 34 | 9 | | | | | | |
| 1 | 16 | 62 | 1 | 24 | 1 | 1 | 0 | 1 | 1 | 1 | 16 | 6 | 13 | 8 | 29 | 10 | | | | | | |
| 1 | 23 | 62 | 1 | 31 | - | - | - | - | - | - | 5 | 11 | 11 | 13 | 16 | 17 | | | | | | |
| 1 | 30 | 62 | 2 | 8 | - | - | - | - | - | - | 10 | 6 | 23 | 8 | 33 | 10 | | | | | | |
| 2 | 6 | 62 | 2 | 15 | - | - | - | - | - | - | 0 | 5 | 9 | 6 | 9 | 8 | | | | | | |
| 2 | 13 | 62 | 2 | 23 | - | - | - | - | - | - | 0 | 5 | 2 | 8 | 2 | 9 | | | | | | |
| 2 | 20 | 62 | 3 | 2 | 0 | 0 | 2 | 2 | 2 | 2 | 4 | 4 | 16 | 6 | 20 | 7 | | | | | | |
| 2 | 27 | 62 | 3 | 12 | - | - | - | - | - | - | 6 | 4 | 16 | 6 | 22 | 7 | | | | | | |
| 3 | 7 | 62 | 3 | 16 | - | - | - | - | - | - | 0 | 5 | 4 | 8 | 4 | 9 | | | | | | |
| 3 | 13 | 62 | 3 | 23 | - | - | - | - | - | - | 1 | 5 | 14 | 8 | 15 | 9 | | | | | | |
| 3 | 27 | 62 | 4 | 9 | 0 | 0 | 1 | 1 | 1 | 1 | 8 | 4 | 25 | 6 | 33 | 7 | | | | | | |
| 4 | 2 | 62 | 4 | 16 | - | - | - | - | - | - | 30 | 8 | 32 | 8 | 62 | - | | | | | | |
| 4 | 10 | 62 | 4 | 24 | - | - | - | - | - | - | 74 | 14 | 113 | 16 | 187 | 21 | | | | | | |
| 4 | 19 | 62 | 4 | 30 | 0 | 1 | 1 | 1 | 1 | 1 | 17 | 5 | 53 | 7 | 70 | 9 | | | | | | |
| 4 | 24 | 62 | 6 | 14 | - | - | - | - | - | - | 11 | 6 | 61 | 9 | 72 | 11 | | | | | | |
| 5 | 1 | 62 | 6 | 4 | - | - | - | - | - | - | 0 | 18 | 31 | 16 | 31 | 24 | | | | | | |
| 5 | 8 | 62 | 6 | 19 | - | - | - | - | - | - | 4 | 7 | 41 | 10 | 45 | 12 | | | | | | |
| 5 | 15 | 62 | 6 | 22 | - | - | - | - | - | - | 46 | 14 | 42 | 6 | 88 | 15 | | | | | | |
| 5 | 22 | 62 | 6 | 26 | 0 | 1 | 2 | 2 | 2 | 2 | 19 | 7 | 54 | 9 | 73 | 11 | | | | | | |
| 6 | 5 | 62 | 8 | 1 | - | - | - | - | - | - | 4 | 5 | 67 | 10 | 71 | 11 | | | | | | |
| 6 | 17 | 62 | 7 | 17 | - | - | - | - | - | - | 46 | 16 | 93 | 11 | 139 | 19 | | | | | | |
| 6 | 19 | 62 | 7 | 14 | 1 | 1 | 3 | 2 | 4 | 2 | 24 | 4 | 2 | 6 | 86 | 7 | | | | | | |
| 6 | 26 | 62 | 7 | 20 | - | - | - | - | - | - | 23 | 4 | 50 | 5 | 73 | 6 | | | | | | |
| 7 | 3 | 62 | 8 | 1 | - | - | - | - | - | - | 9 | 13 | 42 | 16 | 51 | 21 | | | | | | |
| 7 | 8 | 62 | 8 | 6 | - | - | - | - | - | - | 12 | 4 | 33 | 4 | 45 | 6 | | | | | | |
| 7 | 16 | 62 | 8 | 8 | 2 | 1 | 3 | 3 | 5 | 3 | 16 | 12 | 52 | 15 | 68 | 19 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** MINNESOTA

**MAJOR BASIN** UPPER MISSISSIPPI RIVER

**MINOR BASIN** UPPER PORTION UPPER MISSISSIPPI

**STATION LOCATION** MISSISSIPPI RIVER LOCK DAM #3 BELOW
ST. PAUL, MINNESOTA 27

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 7 | 24 | 62 | 8 | 9 | – | – | – | – | – | – | 31 | 13 | 62 | 15 | 93 | 20 | | | | | | |
| 7 | 31 | 62 | 9 | 20 | – | – | – | – | – | – | 4 | 13 | 51 | 17 | 55 | 21 | | | | | | |
| 8 | 14 | 62 | 9 | 3 | – | – | – | – | – | – | 4 | 11 | 37 | 14 | 41 | 18 | | | | | | |
| 8 | 21 | 62 | 10 | 13 | 0 | 0 | 2 | 2 | 2 | 2 | 7 | 5 | 44 | 9 | 51 | 10 | | | | | | |
| 8 | 28 | 62 | 9 | 30 | – | – | – | – | – | – | 49 | 12 | 4 | 8 | 53 | 14 | | | | | | |
| 9 | 4 | 62 | 9 | 28 | – | – | – | – | – | – | 11 | 7 | 41 | 10 | 52 | 12 | | | | | | |
| 9 | 11 | 62 | 10 | 2 | – | – | – | – | – | – | 9 | 6 | 30 | 9 | 39 | 9 | | | | | | |
| 9 | 18 | 62 | 10 | 9 | 0 | 0 | 2 | 2 | 2 | 2 | 7 | 7 | 29 | 10 | 36 | 12 | | | | | | |
| 9 | 25 | 62 | 10 | 17 | – | – | – | – | – | – | 4 | 6 | 29 | 8 | 33 | 10 | | | | | | |

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 10 | 61 | 38400 | 0 | 290 | 5230 | 0 | 540 | 850 | 30690 | 850 | 9380 | 290 | 71 | 8 | 68 | 6 | 24 | 4 | 34 | 3 | 38 | 3 | 60 | 3 | 69 | 3 | 25 | 2 | 30 | 2 | 92 | 1 |
| 10 | 23 | 61 | 20600 | 50 | 160 | 3950 | 0 | 160 | 360 | 15640 | 340 | 6480 | 290 | 71 | 7 | 68 | 5 | 44 | 3 | 25 | 3 | 38 | 2 | 60 | 2 | 30 | 2 | 69 | 2 | 67 | 1 | 35 | 1 |
| 11 | 14 | 61 | 22300 | 110 | 50 | 1720 | 0 | 650 | 20 | 19120 | 630 | 5610 | 360 | 71 | 7 | 68 | 3 | 25 | 2 | 57 | 2 | 92 | 2 | 38 | 2 | 69 | 1 | 51 | 1 | 24 | 1 | | |
| 11 | 21 | 61 | 16900 | 20 | 20 | 670 | 0 | 330 | 20 | 15320 | 560 | 1430 | 80 | 71 | 7 | 92 | 2 | 38 | 2 | 69 | 1 | 51 | 1 | | | | | | | | | | |
| 12 | 12 | 61 | 5000 | 380 | 50 | 660 | 0 | 470 | 90 | 2880 | 430 | 1710 | 20 | 71 | 5 | 3 | 2 | 25 | 2 | 92 | 1 | 57 | 1 | 51 | 1 | | | | | | | | |
| 12 | 28 | 61 | 9000 | 180 | 250 | 270 | 0 | 200 | 140 | 7810 | 180 | 360 | 0 | 71 | 6 | 11 | 1 | 3 | 1 | 51 | 1 | | | | | | | | | | | | |
| 1 | 9 | 62 | 1500 | 0 | 0 | 0 | 0 | 20 | 20 | 1470 | 0 | 90 | 50 | 71 | 4 | | | | | | | | | | | | | | | | | | |
| 1 | 23 | 62 | 500 | 0 | 0 | 40 | 0 | 0 | 0 | 390 | 60 | 20 | 40 | 68 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 6 | 62 | 200 | 0 | 20 | 0 | 0 | 0 | 0 | 180 | 0 | 50 | 20 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 20 | 62 | 5100 | 20 | 0 | 50 | 0 | 70 | 4540 | 340 | 50 | 0 | 0 | 65 | 5 | 71 | 1 | | | | | | | | | | | | | | | | |
| 3 | 7 | 62 | 800 | 0 | 0 | 0 | 0 | 670 | 0 | 110 | 20 | 20 | 0 | 57 | 3 | | | | | | | | | | | | | | | | | | |
| 3 | 28 | 62 | 2600 | 0 | 0 | 170 | 0 | 730 | 310 | 1280 | 120 | 250 | 20 | 71 | 3 | 51 | 2 | 68 | 2 | 62 | 1 | 25 | 1 | | | | | | | | | | |
| 4 | 3 | 62 | 7600 | 0 | 20 | 460 | 0 | 730 | 0 | 3790 | 2590 | 2610 | 770 | 71 | 4 | 69 | 3 | 92 | 3 | 68 | 3 | 51 | 2 | 88 | 2 | 78 | 2 | 91 | 1 | 38 | 1 | 57 | 1 |
| 4 | 17 | 62 | 1400 | 0 | 40 | 250 | 20 | 110 | 0 | 740 | 230 | 1060 | 550 | 71 | 2 | 68 | 1 | | | | | | | | | | | | | | | | |
| 5 | 1 | 62 | 35700 | 0 | 20 | 1520 | 0 | 1090 | 290 | 29660 | 3140 | 4550 | 1150 | 71 | 8 | 68 | 5 | 92 | 4 | 69 | 3 | 51 | 3 | 88 | 3 | 82 | 2 | 25 | 2 | 57 | 1 | 34 | 1 |
| 5 | 15 | 62 | 29800 | 250 | 80 | 3230 | 0 | 790 | 170 | 20660 | 4600 | 72860 | 500 | 71 | 7 | 68 | 4 | 92 | 4 | 38 | 4 | 69 | 3 | 88 | 2 | 77 | 2 | 51 | 2 | 24 | 2 | 25 | 2 |
| 6 | 5 | 62 | 6900 | 80 | 40 | 420 | 250 | 40 | 0 | 4920 | 1180 | 3670 | 1140 | 71 | 5 | 68 | 3 | 69 | 2 | 50 | 1 | 92 | 1 | | | | | | | | | | |
| 6 | 19 | 62 | 20000 | 330 | 830 | 2110 | * | 1620 | 460 | 8820 | 4370 | 4840 | 870 | 71 | 6 | 51 | 4 | 68 | 4 | 50 | 4 | 69 | 3 | 25 | 3 | 12 | 3 | 82 | 2 | 38 | 2 | 87 | 2 |
| 7 | 3 | 62 | 7900 | 210 | 100 | 810 | 190 | 410 | 190 | 4950 | 1010 | 2240 | 230 | 71 | 4 | 68 | 3 | 51 | 2 | 87 | 1 | 88 | 1 | 38 | 1 | 25 | 1 | 50 | 1 | 60 | 1 | | |
| 7 | 17 | 62 | 7700 | 80 | 170 | 620 | 170 | 210 | 40 | 4550 | 1820 | 1530 | 410 | 71 | 4 | 68 | 4 | 69 | 3 | 92 | 2 | 88 | 1 | 85 | 1 | 38 | 1 | 25 | 1 | 50 | 1 | 51 | 1 |
| 8 | 7 | 62 | 6700 | 210 | 60 | 870 | 20 | 210 | 210 | 4140 | 990 | 1410 | 120 | 68 | 4 | 71 | 4 | 69 | 3 | 38 | 2 | 88 | 2 | 3 | 1 | 25 | 1 | 60 | 1 | 51 | 1 | | |
| 8 | 21 | 62 | 8500 | 150 | 100 | 1030 | 330 | 1220 | 540 | 4180 | 910 | 3270 | 370 | 71 | 4 | 68 | 4 | 51 | 3 | 69 | 3 | 60 | 2 | 38 | 2 | 50 | 2 | 24 | 1 | 92 | 1 | 88 | 1 |
| 9 | 4 | 62 | 11400 | 40 | 60 | 1820 | 230 | 970 | 290 | 6440 | 1570 | 1780 | 370 | 71 | 5 | 68 | 4 | 69 | 4 | 38 | 3 | 51 | 3 | 88 | 3 | 87 | 2 | 25 | 1 | 60 | 1 | 50 | 1 |
| 9 | 11 | 62 | 3400 | 50 | 90 | 340 | 0 | 0 | 0 | 2810 | 160 | 680 | 470 | 71 | 4 | 68 | 4 | | | | | | | | | | | | | | | | |
| *6 | 19 | 62 | | | | | 1450 | | | | | | | | | | | | | | | | | | | | | | | | | | |

NATIONAL WATER QUALITY NETWORK

# PLANKTON POPULATION

**STATE** MINNESOTA

**MAJOR BASIN** UPPER MISSISSIPPI RIVER

**MINOR BASIN** UPPER PORTION UPPER MISSISSIPPI

**STATION LOCATION** MISSISSIPPI RIVER LOCK DAM #3 BELOW

ST. PAUL, MINNESOTA 027

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 10 | 61 | 56 | 80 | 58 | 11 | 83 | 3 | 61 | 2 | 4 | 90 | 0 | 119 | 2 | 5 | 11 | 1 | | | | | | | 11 | 50 | 1 | 76 | 1 | 51 | 1 | 0 | 0 |
| 10 | 23 | 61 | 56 | 62 | 82 | 16 | 26 | 7 | 58 | 4 | 11 | 20 | 0 | 211 | 2 | 6 | 11 | 3 | 17 | 1 | | | | | 13 | 50 | 1 | 76 | 1 | 51 | 1 | 0 | 0 |
| 11 | 14 | 61 | 82 | 60 | 56 | 11 | 83 | 11 | 89 | 5 | 13 | 110 | 0 | 40 | 2 | 2 | 11 | 1 | 17 | 1 | | | | | 8 | 76 | 1 | | | | | 0 | 0 |
| 11 | 21 | 61 | 82 | 62 | 83 | 17 | 56 | 12 | 26 | 4 | 5 | 0 | 10 | 9 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 12 | 61 | 82 | 72 | 83 | 18 | 89 | 3 | 56 | 3 | 4 | 320 | 0 | 47 | 2 | 2 | 11 | 2 | 17 | 1 | 21 | 1 | | | 4 | 51 | 1 | | | | | 0 | 0 |
| 12 | 28 | 61 | 82 | 79 | 92 | 6 | 56 | 5 | 83 | 2 | 8 | 320 | 0 | 36 | 11 | 2 | 21 | 1 | 17 | 1 | 2 | 1 | | | 4 | 50 | 1 | | | | | 0 | 0 |
| 1 | 9 | 62 | 82 | 86 | 56 | 3 | 89 | 2 | 92 | 2 | 7 | 20 | 10 | 18 | 17 | 1 | 11 | 1 | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 1 | 23 | 62 | | | | | | | | | | 0 | 10 | 5 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 6 | 62 | | | | | | | | | | 20 | 20 | 7 | | | | | | | | | | | 3 | 50 | 1 | | | | | 1 | 0 |
| 2 | 20 | 62 | | | | | | | | | | 140 | 60 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 7 | 62 | 82 | 27 | 56 | 14 | 64 | 5 | 18 | 5 | 49 | 20 | 10 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 28 | 62 | 82 | 47 | 26 | 12 | 56 | 6 | 89 | 5 | 30 | 60 | 20 | 3 | | | | | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 4 | 3 | 62 | 56 | 43 | 92 | 9 | 82 | 5 | 47 | 5 | 38 | 100 | 10 | 19 | 20 | 2 | | | | | | | | | 2 | | | | | | | 1 | 0 |
| 4 | 17 | 62 | 82 | 14 | 26 | 13 | 56 | 11 | 58 | 8 | 54 | 0 | 0 | 4 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 5 | 1 | 62 | 56 | 33 | 92 | 10 | 45 | 9 | 82 | 8 | 40 | 0 | 30 | 143 | 21 | 4 | 15 | 3 | 2 | 2 | 11 | 2 | 17 | 2 | 28 | 50 | 3 | 76 | 3 | | | 0 | 1 |
| 5 | 15 | 62 | 56 | 30 | 80 | 21 | 92 | 12 | 47 | 8 | 29 | 0 | 0 | 188 | 11 | 5 | 2 | 3 | | | | | | | 42 | 50 | 4 | 51 | 1 | 76 | 3 | 1 | 0 |
| 6 | 5 | 62 | 56 | 26 | 82 | 22 | 58 | 7 | 80 | 6 | 39 | 60 | 10 | 91 | 11 | 4 | 17 | 3 | 2 | 1 | 21 | 1 | | | 22 | 50 | 3 | 76 | 2 | 51 | 1 | 1 | 2 |
| 6 | 19 | 62 | 56 | 21 | 80 | 18 | 82 | 16 | 58 | 10 | 35 | 120 | 10 | 14 | 11 | 1 | | | | | | | | | 16 | 76 | 2 | 50 | 1 | | | 0 | 0 |
| 7 | 3 | 62 | 56 | 26 | 82 | 20 | 58 | 17 | 26 | 11 | 26 | 0 | 0 | 16 | 17 | 1 | 11 | 1 | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 17 | 62 | 56 | 35 | 58 | 17 | 26 | 12 | 82 | 6 | 30 | 0 | 0 | 158 | 17 | 4 | 11 | 3 | 21 | 3 | 2 | 2 | 22 | 2 | 18 | 50 | 2 | 76 | 1 | | | 1 | 1 |
| 8 | 7 | 62 | 56 | 39 | 58 | 26 | 26 | 11 | 82 | 4 | 20 | 0 | 0 | 640 | 11 | 5 | 17 | 5 | 2 | 5 | 22 | 4 | 16 | 4 | 3 | 76 | 1 | | | | | 0 | 0 |
| 8 | 21 | 62 | 58 | 37 | 56 | 37 | 26 | 7 | 83 | 6 | 13 | 0 | 0 | 574 | 11 | 6 | 2 | 6 | 22 | 4 | 17 | 1 | 16 | 1 | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 58 | 26 | 82 | 21 | 56 | 19 | 26 | 13 | 21 | 0 | 0 | 38 | 2 | 2 | 11 | 2 | 22 | 1 | | | | | 0 | | | | | | | 0 | 1 |
| 9 | 11 | 62 | 58 | 28 | 26 | 19 | 82 | 18 | 56 | 15 | 20 | 0 | 0 | 344 | 11 | 5 | 18 | 3 | 17 | 3 | 2 | 3 | 21 | 3 | 9 | 50 | 2 | 51 | 1 | | | 0 | 1 |

**STATION LOCATION** MISSISSIPPI RIVER LOCK DAM #3 BELOW

ST. PAUL, MINNESOTA 27

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 3 | 61 | 13.2 | 7.6 | 8.2 | 3.5 | 21 | .1 | 1.6 | .8 | 10 | 158 | 170 | 25 | 25 | 26 | .4 | 246 | 50000 |
| 10 | 10 | 61 | 15.6 | 10.3 | 8.4 | 6.9 | 29 | .5 | 2.3 | .3 | 10 | 163 | 160 | 25 | 55 | 31 | .3 | 245 | 5300 |
| 10 | 17 | 61 | 14.6 | 8.8 | 8.0 | 4.6 | 23 | .1 | .8 | .6 | 13 | 159 | 180 | 20 | 35 | 47 | .5 | 268 | 2100 |
| 10 | 24 | 61 | 11.4 | 8.8 | 8.1 | 5.1 | 23 | .5 | .5 | .6 | 13 | 166 | 188 | 25 | 40 | 33 | .5 | 262 | 16000 |
| 10 | 31 | 61 | 9.6 | 9.5 | 8.1 | 4.8 | 23 | .2 | .3 | .7 | 12 | 173 | 198 | 20 | 40 | 34 | .6 | 270 | 27000 |
| 11 | 7 | 61 | 6.0 | 9.8 | 8.1 | 3.0 | 18 | .1 | .6 | .6 | 9 | 157 | 173 | 20 | 9 | 25 | .5 | 231 | 58000 |
| 11 | 14 | 61 | 4.9 | 10.8 | 8.2 | 3.4 | 20 | .2 | .7 | .4 | 10 | 161 | 184 | 20 | 35 | 27 | .4 | 240 | 16000 |
| 11 | 21 | 61 | 3.0 | 12.9 | 8.3 | 4.2 | 21 | .5 | 1.6 | .3 | 10 | 162 | 186 | 20 | 25 | - | .5 | 265 | 11000 |
| 12 | 5 | 61 | 1.9 | 11.6 | 8.1 | 4.2 | 23 | .4 | 1.0 | .5 | 11 | 171 | 194 | 20 | 15 | 36 | .6 | 282 | - |
| 12 | 12 | 61 | .2 | 13.0 | 8.1 | 3.1 | 23 | .3 | .8 | .7 | 12 | 179 | 208 | 15 | 9 | 37 | .6 | 279 | 5700 |
| 12 | 19 | 61 | 1.2 | 6.7 | 7.9 | 4.2 | 17 | .4 | .7 | 1.0 | 14 | 180 | 204 | 20 | 10 | 38 | .9 | 296 | 7000 |
| 1 | 3 | 62 | .9 | 6.6 | 7.9 | 2.9 | 20 | .1 | .8 | 1.0 | 13 | 180 | 200 | 20 | 8 | 33 | .8 | 295 | 7200 |
| 1 | 9 | 62 | .1 | 7.0 | 7.7 | 1.3 | 20 | .4 | - | 1.2 | 11 | 150 | 160 | 20 | 7 | 29 | .9 | 277 | 500 |
| 1 | 16 | 62 | .0 | 3.8 | 7.8 | 3.4 | 23 | .3 | .8 | 1.1 | 13 | 193 | 210 | 20 | 10 | 28 | 1.0 | 295 | 7300 |
| 1 | 23 | 62 | .1 | 3.5 | 7.6 | 3.4 | - | .0 | .5 | 1.3 | 14 | 189 | 208 | 20 | 7 | 36 | 1.1 | 348 | 5700 |
| 1 | 30 | 62 | .1 | 3.0 | 7.7 | 3.6 | 21 | .1 | .2 | 1.4 | 13 | 183 | 202 | 20 | 9 | 28 | 1.0 | 290 | 1800 |
| 2 | 6 | 62 | .1 | 3.3 | 7.7 | 4.3 | 22 | .2 | - | 1.4 | 16 | 191 | 207 | 20 | 9 | 30 | 1.1 | 309 | 3100 |
| 2 | 14 | 62 | .5 | 2.6 | 7.7 | 4.0 | 21 | .2 | .6 | 1.4 | 18 | 180 | 198 | 15 | 9 | 28 | 1.0 | 271 | 1600 |
| 2 | 20 | 62 | .1 | 2.8 | 7.6 | 4.4 | 32 | - | - | 1.4 | 13 | 180 | 156 | 10 | 10 | 26 | 1.1 | 257 | 11000 |
| 2 | 27 | 62 | .1 | 2.7 | 7.7 | 3.3 | 22 | .2 | - | 1.3 | 16 | 186 | 202 | 10 | 7 | 27 | 1.1 | 280 | 850 |
| 3 | 15 | 62 | .5 | 2.3 | 7.6 | 3.4 | 19 | .4 | .9 | 1.2 | 14 | 172 | 202 | 10 | 9 | - | 1.0 | 278 | 1000 |
| 3 | 27 | 62 | 2.7 | 4.5 | 7.6 | 3.3 | 18 | .1 | .9 | .9 | 13 | 153 | 172 | 10 | 7 | 22 | .8 | 246 | 2100 |
| 4 | 3 | 62 | 1.0 | 9.1 | 7.8 | 6.1 | 34 | .3 | .9 | .9 | 7 | 126 | 154 | 15 | 170 | 30 | .2 | 215 | 18000 |
| 4 | 10 | .62 | 1.1 | 10.4 | 7.8 | 4.9 | 34 | .0 | .0 | .9 | 6 | 104 | 149 | 25 | 150 | 32 | .1 | 213 | 3800 |
| 4 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 6000 |
| 4 | 24 | 62 | 11.3 | 10.0 | 8.1 | 3.7 | 29 | .9 | 12.0 | .2 | 6 | 135 | 212 | 30 | 60 | 64 | .2 | 300 | 17000 |
| 5 | 1 | 62 | 13.3 | 8.9 | 8.3 | 3.8 | 33 | 2.0 | 12.1 | .1 | 6 | 146 | 226 | 30 | 95 | 75 | .2 | 302 | 37000 |
| 5 | 8 | 62 | 13.4 | .8 | 8.1 | 3.5 | 32 | 5.2 | 11.9 | .2 | 6 | 142 | 214 | 30 | 65 | 69 | .2 | 297 | 33000 |
| 5 | 15 | 62 | 18.4 | 7.5 | 8.1 | 3.4 | 33 | 4.2 | 12.1 | .2 | 7 | 142 | 206 | 30 | 85 | 62 | .2 | 294 | 51000 |
| 5 | 22 | 62 | 17.6 | 7.3 | 8.1 | 3.2 | 35 | 5.5 | 13.2 | .2 | 6 | 145 | 190 | 35 | 80 | 51 | .2 | 262 | 28000 |
| 6 | 5 | 62 | 16.6 | 7.0 | 8.0 | 2.9 | 47 | 4.7 | 14.7 | .1 | 5 | 140 | 196 | 70 | 40 | 52 | .3 | 275 | 16000 |
| 6 | 12 | 62 | 18.7 | 6.4 | 8.0 | 2.8 | 42 | 7.0 | 14.9 | .1 | 5 | 156 | 210 | 60 | 85 | 57 | .3 | 296 | 71000 |
| 6 | 19 | 62 | 20.4 | 5.9 | 8.1 | 3.2 | 46 | 5.3 | 15.6 | .2 | 6 | 167 | 236 | 60 | 110 | 67 | .3 | 331 | 75000 |
| 6 | 26 | 62 | 23.6 | 6.2 | 8.1 | 4.4 | 40 | 6.6 | - | .1 | 6 | 167 | 230 | 40 | 90 | 64 | .3 | 314 | 13000 |
| 7 | 3 | 62 | 22.7 | 5.8 | 8.0 | 2.9 | 40 | 6.6 | 14.2 | .4 | 7 | 187 | 232 | 40 | 75 | 66 | .4 | 313 | 31000 |
| 7 | 10 | 62 | 24.5 | 5.5 | 8.0 | 2.7 | 40 | 5.0 | 14.2 | .3 | 7 | 150 | 220 | 40 | 130 | 69 | .3 | 320 | 55000 |
| 7 | 17 | 62 | 22.4 | 5.5 | 7.9 | 3.8 | 37 | 5.9 | 13.9 | .2 | 6 | 172 | 240 | 40 | 100 | 67 | .4 | 342 | 65000 |
| 7 | 24 | 62 | 22.4 | 5.7 | 8.1 | 2.7 | 38 | 5.7 | 12.8 | .2 | 6 | 182 | 248 | 35 | 130 | 68 | .5 | 343 | 10000 |
| 7 | 31 | 62 | 21.3 | 6.6 | 8.2 | 2.9 | 35 | 4.4 | 12.2 | .1 | 6 | 193 | 266 | 35 | 100 | 77 | .6 | 357 | 14000 |

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** UPPER MISSISSIPPI RIVER

**MINOR BASIN** UPPER PORTION UPPER MISSISSIPPI

**STATION LOCATION** MISSISSIPPI RIVER LOCK DAM #3 BELOW

ST. PAUL, MINNESOTA 27

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 8 | 7 | 62 | 24.5 | 6.3 | 8.0 | 3.2 | 38 | 4.5 | 12.8 | .2 | 7 | 198 | 268 | 40 | 85 | 77 | .5 | 377 | 14000 |
| 8 | 14 | 62 | 21.9 | 6.3 | 8.1 | 3.0 | 33 | 5.8 | 13.9 | .2 | 7 | 188 | 243 | 35 | 80 | 61 | .4 | 345 | 28000 |
| 8 | 21 | 62 | 23.9 | 6.6 | 8.1 | 3.2 | 39 | 5.5 | 12.4 | .1 | 7 | 180 | 227 | 30 | 75 | 56 | .4 | 320 | 15000 |
| 8 | 28 | 62 | 23.0 | 6.5 | 8.0 | 4.0 | 34 | 5.6 | 12.4 | .2 | 7 | 170 | 206 | 30 | 50 | 44 | .4 | 290 | 20000 |
| 9 | 5 | 62 | 19.0 | 7.1 | 8.1 | 3.1 | 29 | 5.8 | 12.6 | .3 | 5 | 186 | 230 | 25 | 75 | 52 | .4 | 313 | 59000 |
| 9 | 11 | 62 | 16.5 | 7.0 | 8.0 | 4.9 | 28 | 5.7 | 12.5 | .3 | 7 | 172 | 212 | 30 | 60 | 41 | .5 | 285 | – |
| 9 | 18 | 62 | 18.0 | 7.2 | 8.0 | 3.2 | 28 | 5.4 | 12.2 | .3 | 8 | 193 | 213 | 30 | 60 | 39 | .4 | 275 | 63000 |
| 9 | 25 | 62 | 15.6 | 7.9 | 8.0 | 3.2 | 27 | 5.4 | 11.2 | .2 | 8 | 171 | 202 | 30 | 40 | 35 | .5 | 259 | 41000 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Prescott, Wisconsin
Operated by U.S. Geological Survey

STATE Minnesota

MAJOR BASIN Upper Mississippi River

MINOR BASIN Upper Portion-Upper Mississippi

STATION LOCATION Mississippi River Lock and Dam #3 below
St. Paul, Minnesota

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.940 | 9.270 | 7.130 | 5.850 | 5.080 | 4.950 | 21.300 | 36.900 | 68.800 | 18.500 | 26.000 | 15.500 |
| 2 | 4.360 | 9.380 | 7.160 | 6.020 | 5.040 | 5.410 | 24.000 | 35.000 | 65.300 | 18.000 | 24.800 | 14.400 |
| 3 | 4.710 | 10.500 | 7.400 | 5.930 | 5.060 | 5.320 | 27.400 | 33.500 | 62.400 | 18.600 | 23.800 | 15.800 |
| 4 | 6.020 | 9.980 | 7.290 | 5.900 | 5.110 | 5.620 | 31.000 | 31.600 | 59.800 | 19.200 | 22.800 | 18.800 |
| 5 | 4.730 | 11.100 | 6.940 | 6.180 | 5.540 | 5.990 | 36.000 | 30.000 | 56.000 | 20.900 | 21.500 | 19.100 |
| 6 | 5.570 | 12.800 | 7.140 | 6.290 | 5.610 | 6.310 | 43.800 | 28.200 | 51.700 | 22.900 | 21.400 | 18.700 |
| 7 | 6.280 | 10.900 | 6.420 | 5.870 | 5.720 | 5.990 | 51.300 | 26.000 | 48.100 | 25.000 | 20.800 | 17.200 |
| 8 | 5.540 | 9.740 | 5.100 | 6.240 | 5.450 | 6.170 | 57.200 | 24.500 | 45.400 | 26.700 | 20.700 | 16.300 |
| 9 | 4.860 | 8.800 | 4.570 | 6.160 | 5.080 | 6.200 | 63.300 | 22.500 | 43.100 | 27.400 | 20.100 | 17.100 |
| 10 | 6.790 | 8.390 | 4.450 | 5.160 | 4.710 | 6.530 | 67.200 | 21.700 | 41.200 | 28.800 | 19.900 | 17.500 |
| 11 | 5.360 | 8.120 | 4.460 | 5.540 | 4.750 | 6.480 | 70.000 | 21.700 | 40.300 | 29.700 | 19.900 | 17.300 |
| 12 | 7.190 | 8.540 | 5.080 | 5.010 | 4.740 | 7.000 | 71.500 | 22.800 | 38.800 | 30.700 | 20.400 | 17.200 |
| 13 | 5.670 | 8.150 | 5.480 | 5.070 | 4.870 | 6.870 | 71.100 | 24.200 | 37.200 | 30.700 | 20.000 | 17.600 |
| 14 | 5.800 | 7.570 | 5.740 | 5.080 | 5.240 | 6.670 | 69.700 | 24.600 | 35.600 | 30.800 | 19.700 | 17.500 |
| 15 | 5.160 | 7.190 | 5.970 | 5.260 | 5.760 | 7.010 | 66.800 | 24.900 | 34.000 | 30.800 | 19.700 | 17.400 |
| 16 | 5.150 | 7.730 | 6.490 | 5.230 | 5.630 | 7.350 | 64.000 | 27.300 | 32.200 | 30.600 | 19.900 | 17.300 |
| 17 | 5.150 | 7.100 | 6.460 | 5.180 | 5.710 | 7.600 | 61.600 | 29.200 | 30.300 | 30.500 | 19.600 | 18.100 |
| 18 | 5.980 | 6.680 | 6.600 | 5.110 | 5.590 | 7.660 | 58.300 | 30.400 | 29.400 | 29.700 | 18.600 | 18.600 |
| 19 | 6.320 | 6.380 | 6.680 | 5.030 | 5.350 | 7.310 | 51.900 | 32.100 | 28.000 | 29.900 | 17.500 | 18.100 |
| 20 | 7.030 | 6.510 | 6.080 | 5.110 | 5.430 | 7.960 | 53.800 | 33.000 | 26.900 | 30.700 | 17.200 | 16.800 |
| 21 | 7.430 | 6.820 | 6.350 | 5.100 | 5.440 | 7.940 | 52.800 | 33.400 | 26.600 | 29.800 | 16.000 | 16.300 |
| 22 | 8.540 | 8.080 | 5.950 | 4.910 | 5.430 | 8.230 | 51.300 | 35.700 | 26.600 | 29.900 | 16.200 | 15.500 |
| 23 | 5.710 | 7.610 | 6.530 | 4.730 | 5.530 | 8.460 | 49.500 | 39.400 | 26.500 | 29.900 | 17.100 | 14.600 |
| 24 | 6.100 | 6.930 | 6.830 | 4.870 | 5.440 | 8.270 | 48.200 | 46.700 | 26.000 | 29.700 | 17.500 | 13.900 |
| 25 | 3.680 | 8.460 | 6.920 | 4.580 | 5.440 | 10.600 | 46.400 | 57.000 | 24.600 | 29.900 | 15.200 | 14.000 |
| 26 | 5.740 | 5.060 | 6.990 | 4.470 | 5.460 | 9.930 | 45.400 | 65.500 | 23.100 | 29.600 | 14.800 | 13.300 |
| 27 | 8.120 | 6.800 | 6.310 | 4.420 | 5.400 | 10.700 | 44.100 | 71.200 | 22.500 | 29.100 | 14.400 | 13.200 |
| 28 | 6.860 | 7.020 | 5.990 | 4.430 | 5.860 | 13.300 | 42.100 | 74.400 | 20.900 | 29.000 | 13.600 | 14.100 |
| 29 | 9.040 | 7.070 | 5.650 | 4.720 |  | 15.300 | 40.000 | 75.800 | 20.700 | 28.000 | 13.500 | 14.100 |
| 30 | 7.270 | 6.950 | 5.680 | 5.050 |  | 15.700 | 39.000 | 74.600 | 20.200 | 27.800 | 14.300 | 14.000 |
| 31 | 6.460 |  | 5.930 | 5.110 |  | 19.200 |  | 71.900 |  | 26.800 | 16.300 |  |

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATION LOCATION** MISSOURI RIVER AT

ST. LOUIS, MISSOURI 28

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 16 | 61 | 10 | 30 | 6410 | 123 | 43 | 80 | 1 | 12 | 11 | 1 | 1 | 8 | 1 | 4 | 4 | 1 | 10 |
| 11 | 15 | 61 | 11 | 29 | 3221 | 258 | 46 | 212 | 0 | 11 | 14 | 2 | 1 | 11 | 0 | 7 | 3 | 3 | 8 |
| 12 | 15 | 61 | 1 | 1 | 8393 | 109 | 36 | 73 | 1 | 8 | 13 | 1 | 1 | 11 | 0 | 5 | 2 | 1 | 6 |
| 2 | 15 | 62 | 3 | 1 | 3538# | 210 | 47 | 163 | 2 | 13 | 16 | 2 | 2 | 12 | 0 | 6 | 3 | 0 | 7 |
| 3 | 15 | 62 | 3 | 29 | 2280 | 355 | 138 | 217 | 1 | 37 | 41 | 4 | 3 | 32 | 2 | 17 | 14 | 3 | 25 |
| 5 | 23 | 62 | 6 | 6 | 3695 | 98 | 34 | 64 | 1 | 11 | 9 | 1 | 1 | 7 | 0 | 4 | 4 | 0 | 5 |
| 6 | 15 | 62 | 6 | 29 | 2663 | 110 | 47 | 63 | 1 | 14 | 13 | 1 | 2 | 9 | 1 | 5 | 4 | 1 | 9 |
| 7 | 16 | 62 | 7 | 30 | 2648 | 142 | 46 | 96 | 1 | 13 | 13 | 2 | 1 | 9 | 1 | 8 | 3 | 1 | 7 |
| 8 | 15 | 62 | 8 | 29 | 4680# | 101 | 38 | 63 | 2 | 11 | 9 | 1 | 1 | 6 | 1 | 6 | 3 | 1 | 6 |
| 9 | 14 | 62 | 9 | 28 | 4290 | 163 | 34 | 129 | 0 | 8 | 14 | 1 | 1 | 12 | 0 | 5 | 1 | 1 | 5 |

# ESTIMATED

**STATION LOCATION** MISSOURI RIVER AT

ST. LOUIS, MISSOURI

28

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 14 | - | - | - | - | - | - | 47 | 12 | 18 | 8 | 65 | 14 | | | | | | |
| 10 | 16 | 61 | 10 | 25 | 26 | 21 | 0 | 1 | 26 | 21 | 0 | 1 | 25 | 6 | 25 | 6 | | | | | | |
| 10 | 30 | 61 | 11 | 9 | - | - | - | - | - | - | 9 | 14 | 17 | 14 | 26 | 20 | | | | | | |
| 11 | 7 | 61 | 11 | 24 | - | - | - | - | - | - | 94 | 12 | 47 | 7 | 141 | 14 | | | | | | |
| 11 | 13 | 61 | 11 | 28 | - | - | - | - | - | - | 75 | 10 | 39 | 7 | 114 | 12 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | 1 | 1 | 0 | 1 | 1 | 1 | 38 | 6 | 46 | 6 | 84 | 8 | | | | | | |
| 11 | 27 | 61 | 12 | 26 | - | - | - | - | - | - | 71 | 10 | 53 | 8 | 124 | 13 | | | | | | |
| 12 | 4 | 61 | 12 | 18 | - | - | - | - | - | - | 23 | 8 | 37 | 9 | 60 | 12 | | | | | | |
| 12 | 11 | 61 | 12 | 19 | - | - | - | - | - | - | 31 | 14 | 44 | 15 | 75 | 21 | | | | | | |
| 12 | 18 | 61 | 12 | 29 | 2 | 3 | 2 | 2 | 4 | 4 | 42 | 13 | 29 | 11 | 71 | 17 | | | | | | |
| 12 | 26 | 61 | 1 | 5 | - | - | - | - | - | - | 35 | 13 | 50 | 14 | 85 | 19 | | | | | | |
| 1 | 2 | 62 | 1 | 12 | - | - | - | - | - | - | 14 | 12 | 24 | 15 | 38 | 19 | | | | | | |
| 1 | 8 | 62 | 1 | 19 | - | - | - | - | - | - | 20 | 16 | 22 | 10 | 42 | 19 | | | | | | |
| 1 | 15 | 62 | 1 | 24 | 1 | 1 | 2 | 2 | 3 | 2 | 36 | 8 | 35 | 8 | 71 | 11 | | | | | | |
| 1 | 22 | 62 | 2 | 6 | - | - | - | - | - | - | 17 | 6 | 28 | 9 | 45 | 11 | | | | | | |
| 1 | 29 | 62 | 2 | 8 | - | - | - | - | - | - | 122 | 11 | 38 | 6 | 160 | 13 | | | | | | |
| 2 | 5 | 62 | 2 | 19 | - | - | - | - | - | - | 73 | 11 | 40 | 8 | 113 | 14 | | | | | | |
| 2 | 13 | 62 | 2 | 26 | - | - | - | - | - | - | 6 | 4 | 30 | 6 | 36 | 7 | | | | | | |
| 2 | 19 | 62 | 3 | 5 | 22 | 11 | 1 | 1 | 23 | 11 | 97 | 18 | 16 | 5 | 113 | 19 | | | | | | |
| 2 | 26 | 62 | 3 | 12 | - | - | - | - | - | - | 55 | 19 | 26 | 8 | 81 | 21 | | | | | | |
| 3 | 5 | 62 | 3 | 14 | - | - | - | - | - | - | 29 | 16 | 11 | 13 | 40 | 21 | | | | | | |
| 3 | 12 | 62 | 3 | 23 | - | - | - | - | - | - | 50 | 16 | 27 | 13 | 77 | 21 | | | | | | |
| 3 | 19 | 62 | 3 | 30 | 14 | 8 | 2 | 1 | 16 | 8 | 187 | 19 | 50 | 7 | 237 | 21 | | | | | | |
| 3 | 26 | 62 | 4 | 6 | - | - | - | - | - | - | 136 | 53 | 36 | 8 | 172 | 54 | | | | | | |
| 4 | 2 | 62 | 4 | 13 | - | - | - | - | - | - | 144 | 48 | 50 | 8 | 194 | 49 | | | | | | |
| 4 | 9 | 62 | 6 | 13 | - | - | - | - | - | - | 124 | 39 | 38 | 7 | 162 | 40 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 105 | 20 | 45 | 8 | 150 | 22 | | | | | | |
| 4 | 24 | 62 | 5 | 23 | 2 | 3 | 1 | 2 | 3 | 4 | 50 | 22 | 79 | 18 | 129 | 28 | | | | | | |
| 4 | 30 | 62 | 6 | 4 | - | - | - | - | - | - | 38 | 19 | 41 | 17 | 79 | 25 | | | | | | |
| 5 | 14 | 62 | 6 | 25 | - | - | - | - | - | - | 33 | 18 | 39 | 17 | 72 | 25 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | - | - | - | - | - | - | 18 | 12 | 40 | 14 | 58 | 18 | | | | | | |
| 5 | 28 | 62 | 7 | 2 | 16 | 11 | 4 | 3 | 20 | 11 | 119 | 53 | 30 | 18 | 149 | 56 | | | | | | |
| 6 | 4 | 62 | 7 | 3 | - | - | - | - | - | - | 455 | 98 | 42 | 8 | 497 | 98 | | | | | | |
| 6 | 11 | 62 | 7 | 13 | - | - | - | - | - | - | 202 | 51 | 41 | 5 | 243 | 51 | | | | | | |
| 6 | 18 | 62 | 7 | 16 | - | - | - | - | - | - | 313 | 89 | 44 | 8 | 357 | 89 | | | | | | |
| 6 | 25 | 62 | 7 | 23 | 3 | 10 | 4 | 3 | 7 | 10 | 67 | 57 | 36 | 12 | 103 | 58 | | | | | | |
| 7 | 2 | 62 | 7 | 30 | - | - | - | - | - | - | 138 | 74 | 6 | 9 | 144 | 75 | | | | | | |
| 8 | 6 | 62 | 8 | 28 | - | - | - | - | - | - | 101 | 17 | 49 | 14 | 150 | 22 | | | | | | |
| 8 | 13 | 62 | 8 | 27 | - | - | - | - | - | - | 91 | 34 | 31 | 7 | 122 | 35 | | | | | | |
| 8 | 20 | 62 | 9 | 10 | 6 | 13 | 8 | 4 | 14 | 14 | 245 | 72 | 38 | 15 | 283 | 74 | | | | | | |
| 8 | 27 | 62 | 9 | 18 | - | - | - | - | - | - | 28 | 71 | 34 | 18 | 62 | 73 | | | | | | |

**MAJOR BASIN** MISSOURI RIVER

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT

ST. LOUIS, MISSOURI 28

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 9 | 4 | 62 | 9 | 28 | - | - | - | - | - | - | 57 | 43 | 28 | 18 | 85 | 47 | | | | | | |
| 9 | 17 | 62 | 10 | 16 | 1 | 7 | 2 | 3 | 3 | 8 | 65 | 63 | 57 | 16 | 122 | 65 | | | | | | |
| 9 | 24 | 62 | 10 | 24 | - | - | - | - | - | - | 29 | 18 | 24 | 15 | 53 | 23 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** MISSOURI

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT

ST. LOUIS, MISSOURI 28

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 300 | 0 | 0 | 20 | 0 | 90 | 20 | 20 | 130 | 110 | 200 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 400 | 0 | 0 | 40 | 0 | 20 | 0 | 80 | 230 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 11 | 7 | 61 | 300 | 0 | 0 | 0 | 0 | 90 | 0 | 50 | 130 | 20 | 110 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 400 | 0 | 0 | 20 | 0 | 0 | 0 | 100 | 290 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 400 | 0 | 0 | 20 | 0 | 70 | 20 | 70 | 200 | 160 | 310 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 900 | 0 | 0 | 0 | 0 | 100 | 0 | 480 | 290 | 40 | 60 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 1100 | 0 | 0 | 20 | 0 | 160 | 50 | 770 | 90 | 320 | 0 | 71 | 3 | 51 | 1 | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 200 | 0 | 0 | 0 | 0 | 40 | 0 | 150 | 60 | 60 | 80 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 800 | 0 | 0 | 0 | 0 | 20 | 0 | 170 | 580 | 0 | 80 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 300 | 0 | 0 | 20 | 0 | 20 | 0 | 50 | 220 | 0 | 250 | 91 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 6 | 62 | 500 | 0 | 0 | 20 | 0 | 20 | 0 | 150 | 290 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 26 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 20 | 40 | 290 | 50 | 180 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 700 | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 640 | 0 | 20 | 88 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 1200 | 0 | 20 | 20 | 0 | 290 | 0 | 330 | 560 | 120 | 230 | 88 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 2800 | 0 | 0 | 170 | 740 | 300 | 0 | 1180 | 380 | 1350 | 590 | 71 | 3 | 50 | 3 | 68 | 1 | 57 | 1 | | | | | | | | | | | | |
| 5 | 21 | 62 | 13100 | 170 | 130 | 2660 | 190 | 0 | 0 | 8270 | 1710 | 5530 | 1250 | 71 | 6 | 38 | 3 | 24 | 3 | 92 | 2 | 25 | 1 | 50 | 1 | 77 | 1 | 88 | 1 | | | | |
| 6 | 4 | 62 | 400 | 0 | 0 | 20 | 0 | 0 | 0 | 40 | 350 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 600 | 0 | 0 | 0 | 0 | 100 | 0 | 190 | 310 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 800 | 20 | 0 | 20 | 0 | 20 | 40 | 350 | 330 | 170 | 120 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 1800 | 0 | 0 | 250 | 0 | 80 | 0 | 660 | 830 | 40 | 40 | 71 | 2 | 88 | 1 | 38 | 1 | 69 | 1 | | | | | | | | | | | | |
| 8 | 6 | 62 | 1600 | 0 | 0 | 250 | 0 | 60 | 0 | 440 | 870 | 80 | 40 | 88 | 2 | 71 | 1 | 38 | 1 | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 1000 | 0 | 0 | 130 | 0 | 0 | 0 | 760 | 130 | 40 | 300 | 69 | 2 | 68 | 1 | 71 | 1 | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 11400 | 0 | 0 | 740 | 130 | 300 | 0 | 7170 | 3040 | 1820 | 2110 | 69 | 6 | 71 | 4 | 88 | 3 | 87 | 3 | 68 | 2 | 38 | 1 | | | | | | | | |
| 9 | 17 | 62 | 1800 | 120 | 40 | 150 | 0 | 170 | 0 | 530 | 700 | 460 | 120 | 71 | 1 | 87 | 1 | 93 | 1 | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** MISSOURI

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT

ST. LOUIS, MISSOURI 028

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | | | | | | | | | | 90 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 7 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 46 | 25 | 80 | 9 | 71 | 8 | 55 | 5 | 53 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 46 | 34 | 80 | 9 | 71 | 8 | 78 | 4 | 45 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 82 | 17 | 46 | 13 | 80 | 6 | 71 | 6 | 58 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 6 | 62 | 46 | 16 | 71 | 15 | 92 | 9 | 36 | 5 | 55 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 26 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 4 | 2 | 62 | 71 | 33 | 78 | 8 | 92 | 7 | 74 | 6 | 46 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 71 | 16 | 80 | 7 | 82 | 6 | 26 | 6 | 65 | 80 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 92 | 22 | 80 | 15 | 82 | 9 | 26 | 7 | 47 | 0 | 0 | 14 | 2 | 2 | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 80 | 85 | 92 | 3 | 58 | 2 | 71 | 2 | 8 | 0 | 0 | 249 | 11 | 6 | 2 | 4 | | | | | | | 75 | 50 | 5 | 76 | 3 | 51 | 2 | 0 | 2 |
| 6 | 4 | 62 | 92 | 21 | 71 | 16 | 80 | 10 | 86 | 5 | 48 | 0 | 0 | 1 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 71 | 28 | 92 | 10 | 9 | 6 | 46 | 5 | 51 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 7 | 2 | 62 | 83 | 16 | 80 | 12 | 71 | 11 | 47 | 7 | 54 | 40 | 0 | 0 | | | | | | | | | | | 5 | 76 | 1 | | | | | 0 | 0 |
| 7 | 16 | 62 | 58 | 23 | 71 | 9 | 92 | 6 | 46 | 6 | 56 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 58 | 23 | 71 | 14 | 47 | 7 | 46 | 5 | 51 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 20 | 62 | 58 | 24 | 26 | 9 | 46 | 8 | 92 | 6 | 53 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 9 | 4 | 62 | 58 | 37 | 80 | 27 | 26 | 7 | 64 | 3 | 26 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 58 | 24 | 82 | 10 | 26 | 9 | 80 | 8 | 49 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |

## NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** MISSOURI
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER
**STATION LOCATION** MISSOURI RIVER AT
ST. LOUIS, MISSOURI 28

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 18.3 | 8.4 | 7.8 | 1.7 | 16 | 2.9 | 9.9 | .0 | 13 | 112 | 145 | 26 | 450 | 71 | .5 | 215 | 12000 |
| 10 | 9 | 61 | 18.3 | 7.8 | 8.1 | 1.6 | 21 | 3.3 | 11.0 | .0 | 20 | 128 | 174 | 20 | 800 | 83 | .3 | 304 | 32000 |
| 10 | 16 | 61 | 19.4 | 6.3 | 8.2 | 3.1 | 75 | - | - | .0 | 13 | 114 | 138 | 28 | 1800 | 45 | .3 | 256 | 57000 |
| 10 | 23 | 61 | 15.5 | 8.6 | 8.1 | 1.8 | 15 | 2.6 | 9.7 | .0 | 15 | 128 | 160 | 25 | 400 | 69 | .3 | 296 | 5000 |
| 10 | 30 | 61 | 16.1 | 8.7 | 8.3 | 2.0 | 20 | - | - | - | 20 | 194 | 230 | 15 | 280 | 70 | .4 | - | - |
| 11 | 6 | 61 | 12.8 | 6.7 | 8.2 | 2.9 | 71 | - | - | .1 | 10 | 98 | 115 | 40 | 1400 | 27 | .2 | 154 | 27000 |
| 11 | 13 | 61 | 12.2 | 8.7 | 8.2 | 1.4 | 13 | 3.2 | 8.6 | .1 | 11 | 124 | 145 | 38 | 300 | 43 | .2 | 233 | 4600 |
| 11 | 20 | 61 | 10.0 | 9.5 | 8.1 | 3.9 | 40 | 4.7 | 12.0 | .1 | 12 | 110 | 140 | 26 | 1100 | 32 | .3 | 194 | 45000 |
| 11 | 27 | 61 | 10.0 | 10.4 | 8.3 | 2.2 | 26 | 2.2 | 6.7 | .1 | 12 | 124 | 147 | 24 | 400 | 20 | .3 | 223 | 7600 |
| 12 | 4 | 61 | 11.1 | 10.4 | 8.2 | 2.2 | 26 | 1.8 | 5.7 | .1 | 13 | 196 | 234 | 22 | 220 | 20 | .3 | 313 | 11000 |
| 12 | 11 | 61 | 7.8 | 11.8 | 8.0 | 2.3 | 26 | 1.6 | 3.9 | .0 | 15 | 208 | 105 | 20 | 125 | 70 | .3 | 399 | 9500 |
| 12 | 18 | 61 | 3.3 | 13.8 | 8.2 | 2.3 | 25 | 1.7 | 3.6 | .1 | 14 | 208 | 250 | 16 | 120 | 82 | .3 | 380 | 8000 |
| 12 | 26 | 61 | 3.9 | 12.2 | 8.1 | 5.4 | 36 | 2.3 | 7.6 | .1 | 18 | 121 | 161 | 26 | 250 | 60 | .0 | 326 | - |
| 1 | 2 | 62 | 3.9 | 12.8 | 8.4 | 3.9 | - | - | - | - | 31 | 100 | 231 | 14 | 84 | 89 | .0 | - | - |
| 1 | 8 | 62 | 1.1 | 12.6 | 8.7 | 4.3 | 25 | 3.6 | 7.0 | .2 | 29 | 219 | 228 | 15 | 165 | 64 | .0 | 369 | *170 |
| 1 | 15 | 62 | 2.2 | 12.6 | 8.7 | 3.8 | 25 | - | - | - | 19 | 219 | 280 | 15 | 95 | 67 | .0 | - | 6200 |
| 1 | 22 | 62 | 3.3 | 12.5 | 8.2 | 3.8 | 25 | 3.4 | 4.8 | .2 | 18 | 199 | 246 | 15 | 45 | 83 | .0 | 365 | 570 |
| 1 | 29 | 62 | .6 | 11.7 | 8.2 | 6.0 | 25 | 5.1 | 9.0 | .3 | 15 | 145 | 165 | 26 | 260 | 69 | .3 | 268 | 780 |
| 2 | 5 | 62 | 4.4 | 10.5 | 8.0 | 3.0 | 26 | 4.9 | 10.0 | .4 | 13 | 139 | 173 | 25 | 260 | 56 | .1 | 240 | 5400 |
| 2 | 13 | 62 | 5.6 | 10.9 | 8.0 | 5.8 | 0 | - | - | - | 9 | 113 | 135 | 27 | 850 | 51 | .3 | - | 11000 |
| 2 | 19 | 62 | 3.9 | 10.9 | 8.0 | 3.8 | 29 | - | 5.2 | .2 | 14 | 126 | 150 | 26 | 650 | 51 | .0 | 243 | 11000 |
| 2 | 26 | 62 | 5.6 | 11.1 | 8.1 | 3.7 | 30 | 2.9 | 6.0 | .2 | 13 | 131 | 158 | 30 | 675 | 60 | .0 | 288 | 8800 |
| 3 | 5 | 62 | 3.3 | 12.2 | 8.2 | 8.9 | 30 | - | - | .2 | 20 | 150 | 227 | 24 | 210 | 73 | .3 | 337 | 2300 |
| 3 | 12 | 62 | 5.0 | 11.2 | 8.2 | 3.3 | 31 | 2.2 | 4.8 | .2 | 24 | 190 | 243 | 23 | 195 | 91 | .3 | 361 | 4300 |
| 3 | 19 | 62 | 6.7 | 9.7 | 8.2 | 5.2 | 31 | 2.6 | 5.6 | .2 | 11 | 115 | 143 | 18 | 850 | 57 | .1 | 233 | 2800 |
| 3 | 26 | 62 | 8.9 | 9.2 | 8.1 | 3.3 | 31 | - | - | - | 7 | 100 | 130 | 26 | 1050 | 48 | .2 | - | - |
| 4 | 2 | 62 | 8.9 | 8.3 | 8.0 | 4.4 | 31 | - | - | - | - | 112 | 140 | 26 | 1600 | 26 | .2 | - | 7800 |
| 4 | 9 | 62 | 6.7 | 9.7 | 8.2 | 5.2 | 31 | - | - | - | 9 | 115 | 143 | 18 | 850 | 38 | .1 | - | 8400 |
| 4 | 16 | 62 | 10.6 | 8.6 | 8.3 | 3.1 | 34 | - | - | - | 18 | 151 | 193 | 27 | 375 | 52 | .3 | - | 17000 |
| 4 | 23 | 62 | 9.4 | 8.3 | 8.2 | 2.8 | 34 | - | - | - | 12 | 126 | 129 | 28 | 660 | 52 | .3 | - | 2400 |
| 4 | 30 | 62 | 18.3 | 7.7 | 8.3 | 2.2 | 35 | - | - | - | 18 | 157 | 215 | 58 | 200 | 91 | .3 | - | 1600 |
| 5 | 7 | 62 | 20.0 | 7.6 | 8.2 | 1.1 | 35 | - | - | - | 18 | 155 | 199 | 14 | 178 | 66 | .3 | - | 930 |
| 5 | 14 | 62 | 23.3 | 7.4 | 8.2 | 1.9 | 35 | - | - | - | 24 | 171 | 225 | 14 | 180 | 103 | .3 | - | 2100 |
| 5 | 21 | 62 | 24.4 | 7.5 | 8.3 | 1.5 | 36 | - | - | - | 23 | 184 | 252 | 14 | 165 | 134 | .3 | - | 4400 |
| 5 | 28 | 62 | 25.6 | 6.6 | 8.2 | 2.8 | 37 | - | - | - | 23 | 170 | 234 | 16 | 1325 | 149 | .5 | - | 7200 |
| 6 | 4 | 62 | 22.2 | 5.7 | 7.9 | 2.3 | 38 | - | - | - | 9 | 101 | 120 | 26 | 3250 | 26 | .3 | - | 25000 |
| 6 | 11 | 62 | 22.8 | 6.4 | 8.1 | 2.1 | 38 | - | - | - | 13 | 117 | 148 | 24 | 1750 | 53 | .5 | - | 15000 |
| 6 | 18 | 62 | 23.9 | 6.4 | 8.2 | 1.6 | 46 | - | - | - | 10 | 124 | 157 | 28 | 2250 | 75 | .5 | - | 27000 |
| 6 | 25 | 62 | 25.6 | 6.4 | 8.0 | 1.5 | 31 | - | - | - | 17 | 169 | 235 | 26 | 750 | 109 | .4 | - | 11000 |

NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** MISSOURI
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER
**STATION LOCATION** MISSOURI RIVER AT
ST. LOUIS, MISSOURI 28

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 2 | 62 | 28.3 | 5.8 | 8.2 | .4 | 31 | - | - | - | 19 | 155 | 210 | 26 | 155 | 92 | .4 | - | 20000 |
| 7 | 9 | 62 | 25.0 | 5.9 | 8.1 | 1.2 | 34 | - | - | - | 17 | 150 | 204 | 28 | 1300 | 104 | .6 | - | 28000 |
| 7 | 16 | 62 | 28.9 | 6.0 | 8.2 | 1.3 | 22 | - | - | - | 20 | 156 | 223 | 28 | 800 | 122 | .6 | - | 16000 |
| 7 | 23 | 62 | 27.8 | 6.5 | 8.3 | 1.1 | 41 | - | - | - | 20 | 146 | 200 | 24 | 1625 | 87 | .6 | - | 28000 |
| 7 | 30 | 62 | 25.6 | 6.4 | 8.2 | 1.1 | 33 | - | - | - | 18 | 136 | 192 | 24 | 1500 | 94 | .8 | - | 27000 |
| 8 | 6 | 62 | 26.1 | 6.7 | 8.2 | 1.4 | 31 | - | - | - | 19 | 154 | 210 | 20 | 1000 | 98 | - | - | 33000 |
| 8 | 13 | 62 | 26.7 | 6.6 | 8.1 | .9 | 20 | - | - | - | 23 | 165 | 227 | 21 | 700 | 96 | .5 | - | 21000 |
| 8 | 20 | 62 | 27.2 | 6.7 | 8.0 | 1.2 | 22 | - | - | - | 25 | 170 | 245 | 20 | 900 | 130 | .5 | - | 9000 |
| 8 | 27 | 62 | 27.2 | 5.7 | 8.3 | .8 | 8 | - | - | - | 22 | 164 | 233 | 20 | 200 | 132 | .5 | - | 7100 |
| 9 | 4 | 62 | 26.7 | 6.6 | 8.3 | 1.0 | 31 | - | - | - | 23 | 164 | 257 | 20 | 390 | 161 | .7 | - | - |
| 9 | 11 | 62 | 21.7 | 7.3 | 8.2 | .7 | 20 | - | - | - | 23 | 127 | 194 | 24 | 1200 | 161 | .6 | - | 16000 |
| 9 | 17 | 62 | 23.9 | 7.6 | 8.3 | 1.3 | 17 | 2.6 | 9.0 | .0 | 23 | 163 | 242 | 24 | 370 | 138 | .2 | 434 | 16000 |
| 9 | 24 | 62 | 21.7 | 8.2 | 8.0 | .8 | 9 | 2.5 | 6.8 | .1 | 19 | 155 | 228 | 20 | 290 | 78 | .2 | 436 | 10000 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Hermann, Missouri
Operated by U.S. Geological Survey

STATE Missouri

MAJOR BASIN Missouri River

MINOR BASIN Lower Missouri below Niobrara River

STATION LOCATION Missouri River at

St. Louis, Missouri

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 93.400 | 125.000 | 61.400 | 34.900 | 111.000 | 72.200 | 201.000 | 64.200 | 196.000 | 69.600 | 58.800 | 42.500 |
| 2 | 94.500 | 154.000 | 54.400 | 32.500 | 122.000 | 61.800 | 191.000 | 75.400 | 174.000 | 68.000 | 63.800 | 40.700 |
| 3 | 120.000 | 178.000 | 49.600 | 32.000 | 134.000 | 52.700 | 186.000 | 70.100 | 140.000 | 69.600 | 61.400 | 47.000 |
| 4 | 121.000 | 218.000 | 44.600 | 36.300 | 136.000 | 46.100 | 174.000 | 67.500 | 114.000 | 72.600 | 59.200 | 77.600 |
| 5 | 107.000 | 218.000 | 43.400 | 39.300 | 142.000 | 40.700 | 166.000 | 62.600 | 103.000 | 73.100 | 63.400 | 68.000 |
| 6 | 89.600 | 202.000 | 46.700 | 44.600 | 170.000 | 40.700 | 155.000 | 60.300 | 118.000 | 71.800 | 57.700 | 55.800 |
| 7 | 78.000 | 192.000 | 47.000 | 52.000 | 164.000 | 44.000 | 144.000 | 54.800 | 134.000 | 70.900 | 54.400 | 49.600 |
| 8 | 68.400 | 178.000 | 46.400 | 51.000 | 149.000 | 48.000 | 132.000 | 54.400 | 131.000 | 70.900 | 57.700 | 49.300 |
| 9 | 58.100 | 159.000 | 46.100 | 48.600 | 141.000 | 52.400 | 117.000 | 57.000 | 131.000 | 68.800 | 58.100 | 55.500 |
| 10 | 55.800 | 134.000 | 44.300 | 48.300 | 142.000 | 57.000 | 112.000 | 54.800 | 125.000 | 70.900 | 55.500 | 57.700 |
| 11 | 58.100 | 107.000 | 43.400 | 46.000 | 141.000 | 63.800 | 111.000 | 53.800 | 118.000 | 74.000 | 54.100 | 54.400 |
| 12 | 62.200 | 85.200 | 43.400 | 41.300 | 128.000 | 76.700 | 111.000 | 53.000 | 129.000 | 73.100 | 51.000 | 51.600 |
| 13 | 121.000 | 75.800 | 42.500 | 35.800 | 118.000 | 115.000 | 109.000 | 52.000 | 149.000 | 72.200 | 48.600 | 49.000 |
| 14 | 160.000 | 78.500 | 41.300 | 32.700 | 113.000 | 130.000 | 105.000 | 50.300 | 139.000 | 71.400 | 48.300 | 49.000 |
| 15 | 156.000 | 91.200 | 42.200 | 28.800 | 113.000 | 129.000 | 98.700 | 48.000 | 125.000 | 68.400 | 49.600 | 50.600 |
| 16 | 132.000 | 109.000 | 39.600 | 29.900 | 116.000 | 121.000 | 90.100 | 46.700 | 105.000 | 70.500 | 48.600 | 48.300 |
| 17 | 110.000 | 142.000 | 36.600 | 36.600 | 131.000 | 111.000 | 85.200 | 46.400 | 90.600 | 78.500 | 45.500 | 50.300 |
| 18 | 96.900 | 196.000 | 34.400 | 39.600 | 148.000 | 94.500 | 84.600 | 45.800 | 82.000 | 83.000 | 43.400 | 51.000 |
| 19 | 85.700 | 204.000 | 33.800 | 39.900 | 143.000 | 75.400 | 78.000 | 44.900 | 79.000 | 80.000 | 42.500 | 50.000 |
| 20 | 76.200 | 188.000 | 46.400 | 38.800 | 133.000 | 79.500 | 72.200 | 44.000 | 76.200 | 71.400 | 41.600 | 49.600 |
| 21 | 67.100 | 184.000 | 52.700 | 38.200 | 129.000 | 210.000 | 67.500 | 41.900 | 72.600 | 68.400 | 41.900 | 48.600 |
| 22 | 60.300 | 179.000 | 52.000 | 37.700 | 117.000 | 260.000 | 62.600 | 44.000 | 70.500 | 72.200 | 46.100 | 51.000 |
| 23 | 54.100 | 172.000 | 52.400 | 36.800 | 98.100 | 275.000 | 57.700 | 56.200 | 77.200 | 99.300 | 45.200 | 49.000 |
| 24 | 51.600 | 157.000 | 47.700 | 36.300 | 82.500 | 267.000 | 56.200 | 60.000 | 79.500 | 109.000 | 44.300 | 44.300 |
| 25 | 48.300 | 139.000 | 42.500 | 36.000 | 71.400 | 247.000 | 59.200 | 61.100 | 76.200 | 111.000 | 46.400 | 49.600 |
| 26 | 45.200 | 120.000 | 38.800 | 39.900 | 66.200 | 234.000 | 62.200 | 63.000 | 83.000 | 98.700 | 47.700 | 65.000 |
| 27 | 44.000 | 101.000 | 41.000 | 66.700 | 68.400 | 229.000 | 62.200 | 66.200 | 86.800 | 82.500 | 51.600 | 81.000 |
| 28 | 42.500 | 89.600 | 48.300 | 63.800 | 76.200 | 219.000 | 61.400 | 67.500 | 83.000 | 72.200 | 56.600 | 82.000 |
| 29 | 41.000 | 81.000 | 48.600 | 68.000 |  | 214.000 | 57.700 | 69.200 | 77.200 | 67.100 | 50.000 | 77.600 |
| 30 | 37.400 | 70.500 | 46.100 | 129.000 |  | 219.000 | 53.000 | 75.800 | 72.200 | 60.300 | 45.500 | 69.200 |
| 31 | 57.300 |  | 40.700 | 115.000 |  | 215.000 |  | 153.000 |  | 55.800 | 43.400 |  |

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT

MISSOURI CITY, MISSOURI 108

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 1 | 29 | 62 | 2 | 9 | 11 | 7 | 6 | 4 | 17 | 8 | 89 | 17 | 38 | 12 | 127 | 21 | | | | | | |
| 2 | 20 | 62 | 3 | 8 | 19 | 10 | 2 | 2 | 21 | 10 | 163 | 19 | 48 | 11 | 211 | 22 | | | | | | |
| 2 | 27 | 62 | 3 | 14 | 2 | 4 | 6 | 4 | 8 | 6 | 63 | 14 | 52 | 12 | 115 | 18 | | | | | | |
| 3 | 6 | 62 | 3 | 15 | 1 | 3 | 5 | 4 | 6 | 5 | 36 | 12 | 49 | 12 | 85 | 17 | | | | | | |
| 3 | 13 | 62 | 3 | 23 | 18 | 12 | 2 | 2 | 20 | 12 | 204 | 22 | 51 | 11 | 255 | 25 | | | | | | |
| 3 | 20 | 62 | 4 | 2 | 9 | 9 | 2 | 3 | 11 | 9 | 150 | 20 | 47 | 11 | 197 | 23 | | | | | | |
| 3 | 27 | 62 | 4 | 9 | 25 | 23 | 4 | 2 | 29 | 23 | 230 | 60 | 41 | 9 | 271 | 61 | | | | | | |
| 4 | 3 | 62 | 4 | 20 | 19 | 14 | 2 | 1 | 21 | 14 | 164 | 41 | 39 | 6 | 203 | 41 | | | | | | |
| 5 | 29 | 62 | 6 | 28 | 57 | 29 | 2 | 2 | 59 | 29 | 384 | 66 | 56 | 9 | 440 | 67 | | | | | | |
| 6 | 5 | 62 | 7 | 2 | 70 | 41 | 2 | 2 | 72 | 41 | 618 | 123 | 48 | 14 | 666 | 124 | | | | | | |
| 6 | 12 | 62 | 7 | 17 | 48 | 50 | 1 | 2 | 49 | 50 | 551 | 12 | 46 | 8 | 597 | 14 | | | | | | |
| 6 | 19 | 62 | 8 | 2 | 11 | 15 | 4 | 3 | 15 | 17 | 54 | 79 | 49 | 15 | 103 | 80 | | | | | | |
| 6 | 25 | 62 | 7 | 20 | 0 | 6 | 0 | 2 | 0 | 6 | 303 | 89 | 92 | 14 | 395 | 90 | | | | | | |
| 7 | 3 | 62 | 7 | 30 | 15 | 13 | 4 | 2 | 19 | 13 | 35 | 67 | 20 | 13 | 55 | 68 | | | | | | |
| 7 | 23 | 62 | 8 | 15 | 17 | 24 | 1 | 2 | 18 | 24 | 214 | 98 | 47 | 16 | 261 | 99 | | | | | | |
| 7 | 30 | 62 | 8 | 22 | 13 | 12 | 2 | 2 | 15 | 12 | 172 | 28 | 45 | 15 | 217 | 32 | | | | | | |
| 8 | 6 | 62 | 8 | 29 | 0 | 1 | 2 | 2 | 2 | 2 | 37 | 19 | 16 | 14 | 53 | 24 | | | | | | |
| 8 | 14 | 62 | 8 | 31 | 1 | 15 | 4 | 3 | 5 | 15 | 109 | 81 | 33 | 15 | 142 | 82 | | | | | | |
| 8 | 21 | 62 | 9 | 6 | 1 | 5 | 5 | 3 | 6 | 6 | 7 | 61 | 33 | 14 | 40 | 63 | | | | | | |
| 8 | 28 | 62 | 9 | 17 | 4 | 6 | 3 | 3 | 7 | 7 | 60 | 46 | 42 | 19 | 102 | 50 | | | | | | |
| 9 | 5 | 62 | 9 | 24 | 39 | 21 | 2 | 1 | 41 | 21 | 203 | 95 | 17 | 13 | 220 | 96 | | | | | | |
| 9 | 11 | 62 | 9 | 27 | 5 | 8 | 4 | 3 | 9 | 8 | 102 | 85 | 27 | 18 | 129 | 87 | | | | | | |
| 9 | 18 | 62 | 10 | 15 | 1 | 6 | 5 | 3 | 6 | 7 | 118 | 83 | 57 | 18 | 175 | 85 | | | | | | |
| 9 | 25 | 62 | 10 | 18 | 45 | 39 | 1 | 2 | 46 | 39 | 211 | 166 | 18 | 13 | 229 | 167 | | | | | | |

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT

MISSOURI CITY, MISSOURI

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 2 | 20 | 62 | - | - | - | - | - | - | - | - | 20 | 126 | 220 | 10 | 600 | 73 | .1 | 323 | - |
| 2 | 27 | 62 | - | - | - | - | - | - | - | - | 27 | 194 | 256 | - | 220 | 95 | .3 | 442 | - |
| 3 | 6 | 62 | - | - | 7.1 | - | - | - | - | - | 31 | - | 296 | 10 | 120 | 125 | .2 | 479 | - |
| 3 | 13 | 62 | - | - | - | - | - | - | - | - | 18 | - | - | - | - | 65 | .3 | - | - |
| 3 | 20 | 62 | - | - | - | - | - | - | - | - | 20 | 176 | 236 | - | 280 | 80 | .2 | 347 | - |
| 3 | 27 | 62 | - | - | - | - | - | - | - | - | 13 | 144 | 196 | - | - | 60 | .1 | 294 | - |
| 4 | 3 | 62 | - | - | - | - | - | - | - | - | 9 | 76 | 124 | 10 | - | 50 | .0 | 237 | - |
| 5 | 29 | 62 | - | - | 7.6 | - | - | - | - | - | 13 | 168 | 208 | 20 | 0 | 80 | .2 | 321 | - |
| 6 | 5 | 62 | - | - | 7.5 | - | - | - | - | - | 12 | 172 | 204 | 20 | 0 | 60 | .0 | 303 | - |
| 6 | 12 | 62 | - | - | 7.3 | - | - | - | - | - | 11 | 156 | 184 | 25 | 0 | 65 | .0 | 283 | - |
| 6 | 19 | 62 | - | - | 7.1 | - | - | - | - | - | 16 | 184 | 224 | 25 | 0 | 100 | - | 366 | - |
| 6 | 25 | 62 | - | - | 7.7 | - | - | - | - | .2 | 15 | 150 | 212 | 20 | 0 | 95 | .3 | 336 | - |
| 7 | 3 | 62 | - | - | 7.1 | - | - | - | - | - | 15 | 166 | 240 | - | - | 125 | .3 | 417 | - |
| 7 | 16 | 62 | - | - | - | - | - | - | - | - | 19 | 156 | 208 | 10 | 500 | 105 | .2 | 359 | - |
| 7 | 23 | 62 | - | - | - | - | - | - | - | - | 17 | 168 | 216 | 20 | 800 | 125 | .1 | 395 | - |
| 7 | 30 | 62 | - | - | - | - | - | - | - | - | 18 | 172 | 228 | 10 | 800 | 135 | .4 | 426 | - |
| 8 | 6 | 62 | - | - | 7.8 | - | - | - | - | - | 19 | 186 | 244 | - | - | 120 | .1 | 393 | - |
| 8 | 14 | 62 | - | - | - | - | - | - | - | - | 20 | 174 | 252 | 10 | - | 140 | .0 | 451 | - |
| 8 | 21 | 62 | - | - | - | - | - | - | - | - | 22 | 176 | 252 | 10 | - | 170 | .2 | 468 | - |
| 8 | 28 | 62 | - | - | - | - | - | - | - | - | 21 | 160 | 252 | 5 | - | 170 | .3 | 484 | - |
| 9 | 5 | 62 | - | - | - | - | - | - | - | - | 16 | 144 | 196 | 10 | 5000 | 125 | .2 | 358 | - |
| 9 | 11 | 62 | - | - | - | - | - | - | - | - | 20 | 176 | 252 | 10 | 450 | 155 | .2 | 451 | - |
| 9 | 18 | 62 | - | - | - | - | - | - | - | - | 19 | 176 | 256 | 10 | 5000 | 165 | .2 | 470 | - |
| 9 | 25 | 62 | - | - | 7.7 | - | - | - | - | - | 19 | 156 | 200 | 10 | 5000 | 130 | .2 | 417 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Kansas City, Missouri
Operated by U.S. Geological Survey

STATE Missouri

MAJOR BASIN Missouri River

MINOR BASIN Lower Missouri below Niobrara River

STATION LOCATION Missouri River at
Missouri City, Missouri

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 80.000 | 70.000 | 29.300 | 23.200 | 75.200 | 24.700 | 150.000 | 47.000 | 94.800 | 68.200 | 54.900 | 56.800 |
| 2 | 67.800 | 93.000 | 29.300 | 23.800 | 82.500 | 22.100 | 147.000 | 44.600 | 76.600 | 69.100 | 51.600 | 79.000 |
| 3 | 62.000 | 95.400 | 29.100 | 23.800 | 78.100 | 22.300 | 143.000 | 42.000 | 71.400 | 65.500 | 49.100 | 58.800 |
| 4 | 57.200 | 82.000 | 29.300 | 24.300 | 98.400 | 24.900 | 130.000 | 40.400 | 84.500 | 63.300 | 46.000 | 46.600 |
| 5 | 55.300 | 68.600 | 28.200 | 25.200 | 93.000 | 26.500 | 120.000 | 40.100 | 105.000 | 61.600 | 45.600 | 45.600 |
| 6 | 49.800 | 56.000 | 27.900 | 23.800 | 79.000 | 26.300 | 112.000 | 40.100 | 93.600 | 59.600 | 49.100 | 49.800 |
| 7 | 47.000 | 47.400 | 27.500 | 24.300 | 66.400 | 26.300 | 107.000 | 39.800 | 89.400 | 61.600 | 50.200 | 49.800 |
| 8 | 44.200 | 39.800 | 26.500 | 25.600 | 55.600 | 27.200 | 101.000 | 40.100 | 92.400 | 66.400 | 51.200 | 47.700 |
| 9 | 43.300 | 34.000 | 25.800 | 24.500 | 55.300 | 33.000 | 96.000 | 38.900 | 92.400 | 67.300 | 48.400 | 47.000 |
| 10 | 45.600 | 31.200 | 25.800 | 22.700 | 56.800 | 35.300 | 95.400 | 38.000 | 96.600 | 66.000 | 46.300 | 44.600 |
| 11 | 91.200 | 30.000 | 27.000 | 21.000 | 54.900 | 51.900 | 91.800 | 38.000 | 112.000 | 66.000 | 45.600 | 45.200 |
| 12 | 112.000 | 29.800 | 24.900 | 20.000 | 54.200 | 60.000 | 82.500 | 37.500 | 102.000 | 62.900 | 47.700 | 44.600 |
| 13 | 101.000 | 37.200 | 17.500 | 19.800 | 56.400 | 67.300 | 79.000 | 37.200 | 94.200 | 60.800 | 47.000 | 43.300 |
| 14 | 96.600 | 35.300 | 14.800 | 20.000 | 56.000 | 53.000 | 76.600 | 37.500 | 84.000 | 61.200 | 42.600 | 43.600 |
| 15 | 74.800 | 34.200 | 14.100 | 20.200 | 62.000 | 47.400 | 71.400 | 37.800 | 77.600 | 60.800 | 39.500 | 44.900 |
| 16 | 66.400 | 69.100 | 14.400 | 20.500 | 79.000 | 46.000 | 65.500 | 38.600 | 73.300 | 65.000 | 38.300 | 46.600 |
| 17 | 55.600 | 97.800 | 15.600 | 20.500 | 71.400 | 44.600 | 61.200 | 37.200 | 69.100 | 64.600 | 37.800 | 45.200 |
| 18 | 46.300 | 74.300 | 16.300 | 20.500 | 66.400 | 41.000 | 56.400 | 35.800 | 64.200 | 61.200 | 38.300 | 42.000 |
| 19 | 35.800 | 67.800 | 17.500 | 19.300 | 70.000 | 40.100 | 51.900 | 37.200 | 62.000 | 61.600 | 38.300 | 42.300 |
| 20 | 32.700 | 60.400 | 17.900 | 18.000 | 62.900 | 56.400 | 49.100 | 49.800 | 69.600 | 70.500 | 39.200 | 40.700 |
| 21 | 34.500 | 53.400 | 20.400 | 17.000 | 54.900 | 87.800 | 47.700 | 49.400 | 79.000 | 107.000 | 38.000 | 39.800 |
| 22 | 31.200 | 47.700 | 22.500 | 16.500 | 47.000 | 104.000 | 49.100 | 50.200 | 73.800 | 99.600 | 38.300 | 41.000 |
| 23 | 27.900 | 43.000 | 21.700 | 16.500 | 41.600 | 96.000 | 47.700 | 58.700 | 74.800 | 103.000 | 38.000 | 44.600 |
| 24 | 25.800 | 39.800 | 20.600 | 16.500 | 37.800 | 98.400 | 48.400 | 56.000 | 82.000 | 91.800 | 45.600 | 54.900 |
| 25 | 25.200 | 38.000 | 20.800 | 16.500 | 35.300 | 110.000 | 48.400 | 58.800 | 81.000 | 74.300 | 56.800 | 66.000 |
| 26 | 24.700 | 36.700 | 22.100 | 17.000 | 35.000 | 116.000 | 45.600 | 56.000 | 80.500 | 67.300 | 49.400 | 57.200 |
| 27 | 24.000 | 35.800 | 22.700 | 18.000 | 32.400 | 124.000 | 44.600 | 52.600 | 73.300 | 62.500 | 44.200 | 56.400 |
| 28 | 23.800 | 34.800 | 23.200 | 20.000 | 25.200 | 146.000 | 44.900 | 58.400 | 71.000 | 54.900 | 41.600 | 47.700 |
| 29 | 23.600 | 33.900 | 22.900 | 36.000 |  | 146.000 | 44.900 | 106.000 | 68.600 | 51.600 | 39.500 | 42.600 |
| 30 | 49.400 | 30.500 | 22.700 | 57.600 |  | 141.000 | 47.400 | 162.000 | 67.300 | 58.800 | 38.300 | 42.600 |
| 31 | 75.200 |  | 22.900 | 66.000 |  | 146.000 |  | 144.000 |  | 57.600 | 38.300 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** KANSAS
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER
**STATION LOCATION** MISSOURI RIVER AT
KANSAS CITY, KANSAS

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 23 | - | - | - | - | - | - | 212 | 98 | 17 | 13 | 229 | 99 | | | | | | |
| 10 | 9 | 61 | 10 | 25 | - | - | - | - | - | - | 28 | 19 | 16 | 15 | 44 | 24 | | | | | | |
| 10 | 16 | 61 | 10 | 31 | 5 | 5 | 2 | 2 | 7 | 5 | 39 | 14 | 20 | 10 | 59 | 17 | | | | | | |
| 10 | 23 | 61 | 11 | 2 | 3 | 2 | 5 | 3 | 8 | 4 | 29 | 15 | 19 | 14 | 48 | 21 | | | | | | |
| 10 | 30 | 61 | 11 | 9 | - | - | - | - | - | - | 42 | 12 | 26 | 8 | 68 | 14 | | | | | | |
| 11 | 6 | 61 | 11 | 22 | 3 | 2 | 4 | 3 | 7 | 4 | 117 | 14 | 93 | 15 | 210 | 21 | | | | | | |
| 11 | 13 | 61 | 11 | 28 | - | - | - | - | - | - | 25 | 13 | 68 | 15 | 93 | 20 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | 2 | 3 | 2 | 2 | 4 | 4 | 160 | 11 | 63 | 7 | 223 | 13 | | | | | | |
| 11 | 27 | 61 | 12 | 5 | - | - | - | - | - | - | 82 | 19 | 57 | 16 | 139 | 25 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | - | - | - | - | - | - | 20 | 11 | 33 | 12 | 53 | 16 | | | | | | |
| 12 | 12 | 61 | 12 | 21 | - | - | - | - | - | - | 23 | 15 | 23 | 15 | 46 | 21 | | | | | | |
| 12 | 18 | 61 | 12 | 26 | 1 | 2 | 1 | 2 | 2 | 3 | 28 | 10 | 14 | 9 | 42 | 13 | | | | | | |
| 1 | 2 | 62 | 1 | 10 | - | - | - | - | - | - | 0 | 12 | 2 | 14 | 2 | 18 | | | | | | |
| 1 | 15 | 62 | 1 | 22 | 1 | 1 | 7 | 4 | 8 | 4 | 49 | 11 | 29 | 11 | 78 | 16 | | | | | | |
| 1 | 22 | 62 | 1 | 31 | - | - | - | - | - | - | 2 | 11 | 21 | 14 | 23 | 18 | | | | | | |
| 1 | 30 | 62 | 2 | 12 | - | - | - | - | - | - | 58 | 16 | 42 | 14 | 100 | 21 | | | | | | |
| 2 | 5 | 62 | 2 | 14 | - | - | - | - | - | - | 166 | 15 | 40 | 8 | 206 | 17 | | | | | | |
| 2 | 12 | 62 | 2 | 20 | - | - | - | - | - | - | 62 | 14 | 41 | 11 | 103 | 18 | | | | | | |
| 2 | 19 | 62 | 3 | 5 | 12 | 8 | 3 | 3 | 15 | 9 | 119 | 18 | 37 | 11 | 156 | 21 | | | | | | |
| 2 | 26 | 62 | 3 | 9 | - | - | - | - | - | - | 53 | 12 | 11 | 7 | 64 | 14 | | | | | | |
| 3 | 5 | 62 | 3 | 16 | - | - | - | - | - | - | 12 | 12 | 44 | 15 | 56 | 19 | | | | | | |
| 3 | 12 | 62 | 3 | 23 | - | - | - | - | - | - | 161 | 18 | 41 | 14 | 202 | 23 | | | | | | |
| 3 | 19 | 62 | 3 | 30 | 9 | 7 | 4 | 3 | 13 | 8 | 86 | 17 | 53 | 11 | 139 | 20 | | | | | | |
| 3 | 26 | 62 | 4 | 4 | - | - | - | - | - | - | 279 | 58 | 56 | 9 | 335 | 59 | | | | | | |
| 4 | 2 | 62 | 4 | 13 | - | - | - | - | - | - | 473 | 85 | 60 | 9 | 533 | 85 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 81 | 21 | 54 | 14 | 135 | 25 | | | | | | |
| 4 | 23 | 62 | 6 | 15 | - | - | - | - | - | - | 66 | 20 | 87 | 16 | 153 | 26 | | | | | | |
| 4 | 30 | 62 | 6 | 1 | - | - | - | - | - | - | 40 | 20 | 34 | 17 | 74 | 26 | | | | | | |
| 5 | 7 | 62 | 6 | 8 | - | - | - | - | - | - | 43 | 17 | 22 | 17 | 65 | 24 | | | | | | |
| 5 | 14 | 62 | 6 | 18 | - | - | - | - | - | - | 33 | 19 | 26 | 19 | 59 | 27 | | | | | | |
| 5 | 21 | 62 | 6 | 25 | 35 | 21 | 3 | 3 | 38 | 21 | 246 | 34 | 40 | 9 | 286 | 35 | | | | | | |
| 5 | 28 | 62 | 6 | 28 | - | - | - | - | - | - | 410 | 64 | 60 | 15 | 470 | 66 | | | | | | |
| 6 | 4 | 62 | 7 | 3 | - | - | - | - | - | - | 311 | 97 | 38 | 13 | 349 | 98 | | | | | | |
| 6 | 12 | 62 | 6 | 12 | - | - | - | - | - | - | 640 | 129 | 45 | 10 | 685 | 129 | | | | | | |
| 6 | 19 | 62 | 7 | 16 | 0 | 3 | 0 | 1 | 0 | 3 | 103 | 73 | 53 | 16 | 156 | 75 | | | | | | |
| 6 | 25 | 62 | 7 | 19 | - | - | - | - | - | - | 144 | 71 | 36 | 14 | 180 | 72 | | | | | | |
| 7 | 2 | 62 | 7 | 30 | - | - | - | - | - | - | 19 | 57 | 9 | 9 | 28 | 58 | | | | | | |
| 7 | 9 | 62 | 8 | 6 | - | - | - | - | - | - | 56 | 84 | 49 | 18 | 105 | 86 | | | | | | |
| 7 | 23 | 62 | 8 | 14 | 9 | 7 | 3 | 2 | 12 | 7 | 166 | 30 | 56 | 18 | 222 | 35 | | | | | | |
| 7 | 30 | 62 | 8 | 22 | - | - | - | - | - | - | 64 | 20 | 44 | 15 | 108 | 25 | | | | | | |

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT
KANSAS CITY, KANSAS

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 8 | 6 | 62 | 8 | 28 | - | - | - | - | - | - | 61 | 19 | 55 | 15 | 116 | 24 | | | | | | |
| 8 | 13 | 62 | 8 | 30 | - | - | - | - | - | - | 64 | 67 | 36 | 15 | 100 | 69 | | | | | | |
| 8 | 20 | 62 | 9 | 4 | 4 | 7 | 4 | 3 | 8 | 8 | 65 | 56 | 38 | 14 | 103 | 58 | | | | | | |
| 8 | 27 | 62 | 9 | 25 | - | - | - | - | - | - | 30 | 39 | 33 | 18 | 63 | 43 | | | | | | |
| 9 | 4 | 62 | 10 | 2 | - | - | - | - | - | - | 162 | 93 | 36 | 15 | 198 | 94 | | | | | | |
| 9 | 10 | 62 | 10 | 4 | - | - | - | - | - | - | 89 | 76 | 28 | 17 | 117 | 78 | | | | | | |
| 9 | 17 | 62 | 10 | 10 | 3 | 7 | 3 | 3 | 6 | 8 | 37 | 64 | 34 | 16 | 71 | 66 | | | | | | |
| 9 | 24 | 62 | 10 | 17 | - | - | - | - | - | - | 76 | 19 | 41 | 16 | 117 | 25 | | | | | | |

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE - GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 300 | 0 | 0 | 20 | 0 | 70 | 0 | 70 | 200 | 20 | 400 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 1300 | 0 | 0 | 100 | 0 | 60 | 0 | 370 | 810 | 20 | 460 | 71 | 2 | 88 | 1 | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 2200 | 0 | 20 | 150 | 0 | 170 | 0 | 970 | 930 | 120 | 210 | 68 | 3 | 87 | 1 | 88 | 1 | 71 | 1 | | | | | | | | | | | | |
| 11 | 20 | 61 | 1200 | 0 | 0 | 20 | 0 | 40 | 0 | 540 | 580 | 40 | 270 | 71 | 2 | 92 | 1 | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 2100 | 0 | 0 | 0 | 0 | 190 | 0 | 1350 | 580 | 100 | 520 | 71 | 4 | 92 | 1 | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 2000 | 0 | 20 | 160 | 0 | 110 | 0 | 1590 | 90 | 180 | 130 | 71 | 4 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 1100 | 0 | 0 | 90 | 0 | 160 | 50 | 520 | 290 | 200 | 50 | 68 | 2 | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 300 | 0 | 0 | 20 | 0 | 60 | 0 | 60 | 120 | 40 | 20 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 500 | 0 | 0 | 0 | 0 | 50 | 0 | 20 | 420 | 0 | 220 | 88 | 1 | 91 | 1 | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 900 | 0 | 0 | 50 | 0 | 70 | 0 | 50 | 770 | 50 | 290 | 87 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 500 | 0 | 0 | 0 | 0 | 90 | 90 | 130 | 190 | 40 | 40 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 400 | 0 | 0 | 0 | 0 | 20 | 0 | 70 | 270 | 20 | 70 | 88 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 370 | 40 | 20 | | | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 1400 | 20 | 0 | 20 | 0 | 270 | 40 | 460 | 620 | 60 | 120 | 68 | 1 | 88 | 1 | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 24800 | 40 | 40 | 5340 | 0 | 3600 | 170 | 9770 | 5800 | 5220 | 1700 | 71 | 6 | 51 | 5 | 92 | 4 | 25 | 4 | 24 | 4 | 88 | 4 | 38 | 3 | 45 | 2 | 91 | 2 | 82 | 2 |
| 5 | 21 | 62 | 1800 | 0 | 0 | 0 | 0 | 150 | 0 | 550 | 1140 | 130 | 380 | 88 | 3 | 71 | 2 | 92 | 1 | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 500 | 0 | 20 | 0 | 0 | 60 | 0 | 80 | 370 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 6 | 12 | 62 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 410 | 40 | 20 | | | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 1900 | 20 | 0 | 480 | 40 | 210 | 60 | 370 | 700 | 270 | 350 | 38 | 2 | 51 | 1 | 68 | 1 | 71 | 1 | | | | | | | | | | | | |
| 7 | 16 | 62 | 3800 | 0 | 0 | 0 | 0 | 170 | 20 | 1650 | 1980 | 170 | 630 | 69 | 3 | 88 | 3 | 68 | 1 | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 3700 | 0 | 0 | 640 | 0 | 500 | 0 | 1280 | 1330 | 910 | 700 | 71 | 3 | 88 | 2 | 38 | 2 | 68 | 2 | 69 | 2 | | | | | | | | | | |
| 8 | 27 | 62 | 4400 | 0 | 0 | 540 | 0 | 210 | 0 | 2570 | 1080 | 1080 | 40 | 71 | 4 | 69 | 3 | 88 | 2 | 68 | 1 | 38 | 1 | 86 | 1 | | | | | | | | |
| 9 | 4 | 62 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 80 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 4800 | 40 | 80 | 1160 | 40 | 330 | 0 | 1860 | 1280 | 1660 | 370 | 71 | 3 | 26 | 3 | 88 | 2 | 68 | 2 | 87 | 2 | 51 | 1 | 69 | 1 | 38 | 1 | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** KANSAS

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT
KANSAS CITY, KANSAS 029

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 71 | 19 | 46 | 14 | 80 | 10 | 55 | 3 | 54 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | | | | | | | | | | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | | | | | | | | | | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | | | | | | | | | | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | | | | | | | | | | 160 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 71 | 16 | 46 | 15 | 80 | 11 | 86 | 9 | 49 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 2 | 5 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 86 | 14 | 71 | 13 | 48 | 9 | 65 | 9 | 55 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 71 | 22 | 26 | 11 | 46 | 6 | 78 | 5 | 56 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 26 | 14 | 46 | 12 | 71 | 10 | 80 | 9 | 55 | 60 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 80 | 48 | 82 | 12 | 92 | 10 | 9 | 5 | 25 | 0 | 0 | 11 | 2 | 1 | | | | | | | | | 16 | 76 | 2 | 50 | 1 | | | 0 | 0 |
| 5 | 21 | 62 | 71 | 32 | 9 | 28 | 92 | 11 | 80 | 7 | 22 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 9 | 49 | 71 | 11 | 92 | 8 | 80 | 7 | 25 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 12 | 62 | 71 | 15 | 46 | 13 | 92 | 10 | 73 | 8 | 54 | 20 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 7 | 2 | 62 | 92 | 14 | 71 | 12 | 46 | 8 | 58 | 7 | 59 | 0 | 0 | 0 | | | | | | | | | | | 4 | 76 | 1 | | | | | 0 | 0 |
| 7 | 16 | 62 | 71 | 23 | 58 | 16 | 92 | 7 | 65 | 5 | 49 | 170 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 6 | 62 | 58 | 33 | 80 | 12 | 26 | 7 | 71 | 6 | 42 | 40 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 27 | 62 | 58 | 64 | 80 | 23 | 26 | 4 | 56 | 1 | 8 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 58 | 12 | 71 | 7 | 65 | 7 | 26 | 5 | 69 | - | - | - | | | | | | | | | | | - | | | | | | | - | - |
| 9 | 17 | 62 | 80 | 24 | 26 | 17 | 82 | 11 | 58 | 10 | 38 | 40 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT
KANSAS CITY, KANSAS

2

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 5 | 61 | 10 | 19 | 3752 | 135 | 25 | 110 | 0 | 5 | 10 | 2 | 1 | 6 | 1 | 3 | 1 | 1 | 5 |
| 10 | 24 | 61 | 11 | 6 | 3491 | 143 | 40 | 103 | 1 | 10 | 13 | 2 | 1 | 9 | 1 | 4 | 3 | 1 | 8 |
| 11 | 9 | 61 | 11 | 24 | 4539 | 100 | 19 | 81 | 0 | 2 | 10 | 2 | 1 | 7 | 0 | 2 | 1 | 1 | 3 |
| 11 | 30 | 61 | 12 | 14 | 4820 | 114 | 21 | 93 | 0 | 5 | 9 | 2 | 1 | 6 | 0 | 3 | 2 | 0 | 2 |
| 12 | 14 | 61 | 12 | 29 | 4865 | 154 | 29 | 125 | 1 | 6 | 12 | 2 | 2 | 8 | 0 | 4 | 1 | 1 | 4 |
| 1 | 4 | 62 | 1 | 18 | 5196 | 136 | 29 | 107 | 1 | 4 | 12 | 2 | 2 | 8 | 0 | 4 | 2 | 1 | 5 |
| 1 | 22 | 62 | 2 | 5 | 5333 | 175 | 37 | 138 | 1 | 7 | 16 | 2 | 2 | 11 | 1 | 5 | 2 | 1 | 5 |
| 2 | 20 | 62 | 3 | 11 | 4993 | 164 | 29 | 135 | 0 | 6 | 11 | 1 | 1 | 7 | 2 | 4 | 1 | 0 | 7 |
| 3 | 12 | 62 | 3 | 27 | 4866 | 91 | 25 | 66 | 0 | 3 | 13 | 2 | 1 | 9 | 1 | 3 | 1 | 0 | 5 |
| 4 | 3 | 62 | 4 | 18 | 4825 | 117 | 45 | 72 | 1 | 11 | 17 | 2 | 1 | 14 | 0 | 5 | 3 | 1 | 7 |
| 4 | 24 | 62 | 5 | 8 | 5605 | 81 | 36 | 45 | 2 | 10 | 10 | 2 | 1 | 7 | 0 | 4 | 3 | 1 | 6 |
| 5 | 22 | 62 | 6 | 6 | 3917 | 80 | 25 | 55 | 0 | 6 | 10 | 2 | 1 | 6 | 1 | 3 | 2 | 1 | 3 |
| 6 | 7 | 62 | 6 | 22 | 4769 | 52 | 18 | 34 | 1 | 5 | 6 | 2 | 1 | 3 | 0 | 2 | 1 | 0 | 3 |
| 7 | 17 | 62 | 7 | 30 | 4094 | 55 | 16 | 39 | 0 | 3 | 7 | 2 | 1 | 4 | 0 | 2 | 1 | 0 | 3 |
| 7 | 30 | 62 | 8 | 13 | 4845 | 75 | 27 | 48 | 1 | 7 | 7 | 1 | 1 | 5 | 0 | 4 | 4 | 1 | 3 |
| 8 | 20 | 62 | 9 | 3 | 4818 | 84 | 33 | 51 | 1 | 8 | 9 | 2 | 1 | 6 | 0 | 3 | 2 | 1 | 9 |
| 9 | 6 | 62 | 9 | 20 | 4611 | 73 | 18 | 55 | 1 | 6 | 6 | 1 | 1 | 4 | 0 | 2 | 1 | 0 | 2 |

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** KANSAS
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER
**STATION LOCATION** MISSOURI RIVER AT
KANSAS CITY, KANSAS 29

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 13.7 | 6.9 | 7.8 | 2.4 | 110 | .8 | 3.9 | .1 | 12 | 125 | 162 | 8 | 2600 | 144 | .5 | 310 | 80000 |
| 10 | 9 | 61 | 16.5 | 8.2 | 7.9 | 1.9 | 19 | 2.0 | - | .5 | 18 | 173 | 234 | 4 | 250 | 174 | .2 | 485 | 10000 |
| 10 | 23 | 61 | 13.5 | 8.7 | 7.9 | 2.7 | 18 | 2.1 | 7.0 | .1 | 22 | 208 | 270 | 7 | 250 | 125 | .2 | 459 | 12000 |
| 10 | 30 | 61 | 14.4 | 5.1 | 7.9 | 7.2 | 188 | 1.0 | 3.8 | .2 | 19 | 179 | 236 | 7 | 4500 | 109 | .2 | 375 | 14000 |
| 11 | 6 | 61 | 7.8 | 9.2 | 7.8 | 3.9 | 44 | 3.9 | 10.9 | .1 | 14 | 152 | 181 | 8 | 650 | 71 | .4 | 307 | 15000 |
| 11 | 13 | 61 | 9.0 | 9.7 | 7.9 | - | 25 | 2.6 | 7.0 | .1 | 25 | 205 | 262 | 3 | 340 | 109 | .4 | 431 | 11000 |
| 11 | 27 | 61 | 5.7 | 10.6 | 7.9 | 3.4 | 19 | 2.6 | 7.0 | .1 | 29 | 204 | 255 | 5 | 290 | 99 | .4 | 414 | 25000 |
| 12 | 4 | 61 | 7.2 | 10.6 | 8.0 | 3.0 | 17 | 2.4 | - | .2 | 23 | 218 | 272 | 2 | 150 | 110 | .4 | 472 | 3300 |
| 12 | 11 | 61 | .0 | 12.5 | 8.0 | 3.3 | 16 | 2.6 | 5.0 | .2 | 25 | 210 | 277 | 4 | 135 | 115 | .4 | 452 | 3700 |
| 12 | 18 | 61 | .0 | 12.0 | 7.9 | 2.6 | 14 | .5 | 6.9 | .4 | 21 | 268 | 327 | 1 | 65 | 102 | .4 | 485 | 16000 |
| 1 | 2 | 62 | .0 | 11.8 | 7.8 | 1.7 | 11 | .6 | 6.8 | .4 | 26 | 194 | 284 | 2 | 50 | 130 | .3 | 478 | 3300 |
| 1 | 8 | 62 | .0 | 11.6 | 7.9 | 2.3 | 18 | .3 | - | .5 | 26 | 209 | 263 | 2 | 55 | 144 | .4 | 452 | 11000 |
| 1 | 15 | 62 | .0 | 11.9 | 7.8 | 2.3 | 13 | .5 | 6.2 | .5 | 21 | 223 | 303 | 2 | 50 | 125 | .4 | 514 | 9700 |
| 1 | 22 | 62 | .0 | 11.7 | 7.7 | 2.7 | 9 | .4 | 5.0 | .4 | 26 | 220 | 304 | 2 | 25 | 172 | .4 | 541 | 5200 |
| 1 | 30 | 62 | .0 | 10.4 | 7.7 | 5.8 | 30 | .9 | 10.0 | .4 | 18 | 163 | 214 | 2 | 440 | 113 | .4 | 381 | 2500 |
| 2 | 5 | 62 | .6 | 10.6 | 7.7 | 5.6 | 75 | .9 | 7.7 | .4 | 13 | 143 | 168 | 8 | 1500 | 76 | .3 | 303 | 11000 |
| 2 | 12 | 62 | 1.9 | 11.1 | 7.6 | 4.2 | 25 | 1.3 | 15.0 | .5 | 18 | 160 | - | 3 | 300 | 86 | .3 | 320 | - |
| 2 | 19 | 62 | .8 | 11.1 | 7.8 | 5.8 | 56 | .8 | 9.7 | .4 | 19 | 143 | 192 | 7 | 850 | 85 | .4 | 334 | 13000 |
| 2 | 26 | 62 | .0 | 11.9 | 7.7 | 3.7 | 23 | .6 | 8.9 | .4 | 17 | 185 | 248 | 8 | 210 | 103 | .4 | 402 | 4500 |
| 3 | 5 | 62 | .1 | 12.3 | 8.0 | 1.8 | 42 | .4 | 5.9 | .5 | 11 | 224 | 284 | 3 | 45 | 126 | .4 | 472 | 620 |
| 3 | 12 | 62 | 2.1 | 11.1 | 7.9 | 5.1 | 52 | .2 | - | .4 | 20 | 179 | 227 | 3 | 700 | 96 | .4 | 390 | 10000 |
| 3 | 26 | 62 | 3.8 | 8.6 | 7.8 | 5.3 | 130 | 1.1 | 11.5 | .3 | 12 | 124 | 162 | 3 | 2500 | 72 | .2 | 266 | 7500 |
| 4 | 2 | 62 | 4.4 | 9.0 | 7.8 | 6.1 | 90 | .9 | 14.9 | .7 | 11 | 106 | 13 | 8 | 1700 | 49 | .2 | 212 | 3300 |
| 4 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 9800 |
| 4 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 44000 |
| 4 | 30 | 62 | 17.1 | 7.0 | 7.9 | 2.5 | 29 | 2.9 | 7.7 | .3 | 14 | 160 | 229 | 8 | 310 | 103 | - | 368 | 16000 |
| 5 | 14 | 62 | 21.6 | 7.1 | 8.1 | 2.4 | 29 | 2.6 | 8.9 | .1 | 16 | 188 | 263 | 6 | 240 | 160 | .4 | 487 | 11000 |
| 5 | 21 | 62 | 23.2 | 4.9 | 7.9 | 3.4 | 126 | .8 | 4.8 | .9 | 15 | 176 | 250 | 6 | 2200 | 158 | .3 | 466 | 33000 |
| 5 | 23 | 62 | 14.4 | 7.9 | 7.9 | 3.2 | 34 | 3.9 | 9.4 | .3 | 13 | 161 | 233 | 7 | 430 | 96 | - | 357 | - |
| 5 | 28 | 62 | 21.3 | 5.7 | 7.8 | 3.3 | 253 | .0 | 4.0 | .0 | 11 | 142 | 192 | 8 | 4000 | 107 | - | 334 | - |
| 6 | 19 | 62 | 25.3 | 5.1 | 8.0 | 2.2 | 53 | - | - | .4 | 14 | 174 | 239 | 11 | 800 | 111 | - | 398 | 21000 |
| 6 | 25 | 62 | 25.6 | 4.8 | 7.7 | 2.5 | 85 | 1.9 | 8.9 | .1 | 11 | 154 | 215 | 17 | 1300 | 107 | - | 344 | 28000 |
| 7 | 10 | 62 | 28.0 | 5.1 | 7.9 | 1.5 | 35 | - | - | .0 | 14 | 171 | 248 | 9 | 500 | 155 | - | 451 | 26000 |
| 7 | 16 | 62 | 27.1 | 3.6 | 7.8 | 2.6 | 58 | 3.0 | 11.0 | .0 | 14 | 162 | 221 | 7 | 1500 | 118 | - | 382 | 28000 |
| 7 | 23 | 62 | 26.6 | 3.9 | 7.8 | 2.4 | 131 | .6 | 3.9 | .0 | 20 | 154 | 221 | 8 | 3200 | 126 | - | 410 | 47000 |
| 7 | 30 | 62 | 24.7 | 5.8 | 8.0 | 2.0 | 61 | 1.9 | - | .0 | 15 | 170 | 248 | 7 | 800 | 138 | .7 | 439 | 29000 |
| 8 | 6 | 62 | 27.6 | 5.5 | 7.9 | 1.6 | 54 | 2.9 | 7.0 | .0 | 15 | 174 | 257 | 8 | 500 | 141 | .5 | 451 | 20000 |
| 8 | 13 | 62 | 26.7 | 6.0 | 7.9 | - | 60 | 2.9 | 9.0 | .0 | 16 | 172 | 253 | 7 | 800 | 159 | - | 466 | 26000 |
| 8 | 20 | 62 | 25.3 | 6.4 | 8.0 | 1.7 | 49 | 2.5 | 9.4 | .0 | 19 | 173 | 258 | 7 | 380 | 175 | .6 | 492 | 250000 |

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT

KANSAS CITY, KANSAS 29

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 8 | 27 | 62 | 24.3 | 6.1 | 7.9 | 1.7 | 42 | 2.1 | 10.0 | .0 | 18 | 166 | 263 | 9 | 360 | 184 | .5 | 521 | 19000 |
| 9 | 4 | 62 | 21.5 | 5.5 | 7.8 | 2.6 | 153 | 1.8 | 14.6 | .0 | 18 | 130 | 186 | 11 | 2200 | 127 | .5 | 362 | 100000 |
| 9 | 10 | 62 | 18.6 | 7.3 | 8.1 | 2.4 | 59 | 3.3 | 6.8 | .0 | 13 | 164 | 250 | 6 | 650 | 168 | .5 | 465 | 38000 |
| 9 | 17 | 62 | 22.9 | 6.5 | 8.0 | 2.0 | 52 | 2.6 | 8.0 | .0 | 15 | 176 | 267 | 7 | 420 | 181 | .5 | 496 | 19000 |
| 9 | 24 | 62 | 18.4 | 7.5 | 8.0 | 2.5 | 45 | 3.0 | 5.8 | .0 | 18 | 168 | 315 | 6 | 340 | 187 | .3 | 504 | 78000 |

MINOR BASIN Lower Missouri below Niobrara River

Computed Data for Kansas City, Kansas
Operated by U.S. Geological Survey

STATION LOCATION Missouri River at
Kansas City, Kansas

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 71.500 | 40.000 | 21.800 | 18.800 | 31.200 | 19.600 | 140.000 | 41.100 | 73.500 | 52.000 | 45.100 | 52.300 |
| 2 | 59.800 | 48.100 | 22.100 | 19.300 | 37.500 | 16.800 | 139.000 | 39.000 | 59.100 | 53.500 | 41.800 | 72.600 |
| 3 | 54.200 | 48.000 | 22.000 | 19.100 | 32.900 | 16.800 | 133.000 | 36.800 | 54.900 | 51.200 | 39.400 | 53.400 |
| 4 | 45.100 | 47.200 | 22.700 | 19.400 | 57.800 | 18.300 | 120.000 | 35.600 | 47.500 | 50.900 | 36.200 | 41.800 |
| 5 | 42.700 | 47.100 | 22.100 | 20.300 | 55.700 | 18.800 | 112.000 | 35.400 | 58.900 | 50.800 | 33.500 | 41.000 |
| 6 | 40.100 | 41.700 | 21.800 | 18.900 | 49.000 | 19.100 | 104.000 | 35.600 | 59.500 | 50.200 | 35.400 | 44.600 |
| 7 | 38.700 | 36.400 | 21.600 | 19.500 | 44.400 | 19.300 | 96.100 | 35.700 | 56.400 | 51.200 | 36.200 | 44.800 |
| 8 | 37.300 | 30.000 | 20.800 | 20.800 | 35.700 | 19.000 | 87.900 | 36.100 | 64.100 | 54.400 | 37.000 | 42.000 |
| 9 | 36.800 | 24.900 | 20.400 | 19.800 | 39.300 | 22.500 | 83.400 | 35.300 | 65.000 | 54.800 | 36.400 | 38.800 |
| 10 | 37.900 | 22.800 | 20.100 | 18.100 | 42.500 | 26.100 | 83.600 | 34.200 | 69.800 | 53.300 | 36.800 | 38.300 |
| 11 | 59.800 | 22.000 | 19.600 | 16.600 | 41.300 | 44.000 | 82.300 | 33.900 | 89.300 | 52.800 | 36.100 | 39.300 |
| 12 | 64.000 | 22.000 | 19.200 | 15.700 | 40.800 | 48.400 | 75.300 | 33.400 | 83.100 | 50.500 | 37.500 | 39.100 |
| 13 | 63.000 | 24.500 | 13.900 | 15.100 | 43.300 | 56.200 | 72.100 | 33.000 | 76.400 | 48.400 | 37.500 | 38.600 |
| 14 | 54.500 | 26.800 | 11.000 | 15.000 | 44.000 | 44.600 | 69.300 | 33.400 | 66.700 | 48.000 | 34.600 | 39.500 |
| 15 | 48.200 | 25.000 | 10.200 | 15.000 | 50.600 | 39.700 | 64.000 | 34.300 | 60.700 | 46.100 | 32.500 | 38.600 |
| 16 | 44.900 | 43.500 | 10.200 | 15.300 | 66.000 | 38.100 | 58.500 | 35.000 | 56.900 | 51.400 | 32.100 | 39.300 |
| 17 | 37.600 | 64.300 | 11.300 | 15.300 | 58.800 | 36.400 | 54.400 | 33.700 | 54.300 | 50.200 | 31.800 | 40.000 |
| 18 | 32.900 | 50.600 | 11.500 | 15.500 | 52.900 | 32.800 | 49.800 | 32.600 | 51.700 | 47.000 | 32.500 | 37.600 |
| 19 | 27.500 | 46.400 | 12.400 | 14.700 | 55.500 | 31.800 | 46.300 | 33.900 | 50.500 | 48.000 | 32.600 | 38.200 |
| 20 | 22.900 | 43.700 | 12.600 | 13.700 | 51.700 | 46.100 | 43.300 | 46.000 | 59.000 | 52.200 | 33.800 | 36.700 |
| 21 | 22.800 | 39.800 | 15.200 | 12.800 | 44.800 | 61.600 | 41.700 | 44.000 | 68.900 | 81.200 | 32.800 | 35.500 |
| 22 | 23.200 | 35.800 | 17.500 | 12.300 | 37.100 | 68.800 | 42.900 | 46.300 | 64.400 | 79.600 | 33.200 | 34.400 |
| 23 | 21.600 | 32.300 | 16.600 | 12.200 | 32.200 | 74.200 | 41.500 | 54.900 | 65.100 | 85.600 | 33.200 | 37.100 |
| 24 | 20.200 | 30.100 | 15.500 | 12.100 | 28.400 | 83.000 | 42.200 | 52.000 | 71.400 | 76.100 | 37.200 | 35.800 |
| 25 | 19.600 | 29.200 | 15.800 | 11.800 | 26.200 | 92.200 | 42.300 | 53.900 | 67.100 | 61.600 | 43.000 | 37.700 |
| 26 | 19.300 | 28.100 | 17.400 | 10.000 | 26.200 | 97.100 | 39.500 | 51.100 | 61.700 | 53.100 | 41.700 | 35.900 |
| 27 | 18.800 | 26.700 | 18.100 | 8.000 | 24.700 | 97.400 | 38.600 | 48.200 | 56.800 | 48.500 | 37.900 | 36.200 |
| 28 | 18.500 | 26.000 | 18.700 | 2.000 | 19.400 | 113.000 | 39.000 | 53.100 | 55.100 | 42.000 | 34.500 | 36.700 |
| 29 | 18.200 | 25.800 | 18.400 | 4.000 |  | 121.000 | 39.200 | 89.600 | 52.800 | 40.500 | 33.200 | 34.900 |
| 30 | 34.800 | 22.800 | 18.300 | 23.600 |  | 124.000 | 41.100 | 103.000 | 51.000 | 48.400 | 33.400 | 35.900 |
| 31 | 33.400 |  | 18.500 | 27.000 |  | 134.000 |  | 104.000 |  | 47.600 | 33.700 |  |

Computed as sum of Missouri River at Kansas City, Missouri minus the sum of Kansas River at Bonner Springs, Kansas.

# RADIOACTIVITY DETERMINATIONS

**STATE** MISSOURI

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT
ST. JOSEPH, MISSOURI 30

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 5 | 61 | 10 | 16 | - | - | - | - | - | - | 39 | 16 | 29 | 12 | 68 | 20 | | | | | | |
| 10 | 9 | 61 | 10 | 27 | - | - | - | - | - | - | 36 | 18 | 28 | 14 | 64 | 23 | | | | | | |
| 10 | 16 | 61 | 10 | 25 | - | - | - | - | - | - | 59 | 18 | 29 | 11 | 88 | 21 | | | | | | |
| 10 | 23 | 61 | 11 | 2 | 3 | 4 | 4 | 3 | 7 | 5 | 23 | 13 | 24 | 12 | 47 | 18 | | | | | | |
| 10 | 30 | 61 | 11 | 6 | - | - | - | - | - | - | 14 | 17 | 35 | 14 | 49 | 22 | | | | | | |
| 11 | 6 | 61 | 11 | 17 | 2 | 4 | 5 | 3 | 7 | 5 | 228 | 21 | 167 | 17 | 395 | 27 | | | | | | |
| 12 | 5 | 61 | 12 | 18 | - | - | - | - | - | - | 16 | 15 | 23 | 15 | 39 | 21 | | | | | | |
| 12 | 18 | 61 | 1 | 2 | - | - | - | - | - | - | 8 | 12 | 26 | 15 | 34 | 19 | | | | | | |
| 12 | 25 | 61 | 1 | 3 | 0 | 1 | 5 | 4 | 5 | 4 | 9 | 9 | 30 | 11 | 39 | 14 | | | | | | |
| 1 | 2 | 62 | 1 | 15 | - | - | - | - | - | - | 16 | 12 | 30 | 15 | 46 | 19 | | | | | | |
| 1 | 8 | 62 | 1 | 24 | - | - | - | - | - | - | 5 | 11 | 25 | 14 | 30 | 18 | | | | | | |
| 1 | 15 | 62 | 1 | 25 | - | - | - | - | - | - | 0 | 11 | 25 | 15 | 25 | 19 | | | | | | |
| 1 | 22 | 62 | 2 | 2 | 0 | 1 | 7 | 4 | 7 | 4 | 8 | 11 | 31 | 15 | 39 | 19 | | | | | | |
| 1 | 31 | 62 | 2 | 13 | - | - | - | - | - | - | 64 | 19 | 53 | 15 | 117 | 24 | | | | | | |
| 2 | 6 | 62 | 2 | 19 | - | - | - | - | - | - | 114 | 15 | 16 | 5 | 130 | 16 | | | | | | |
| 2 | 19 | 62 | 3 | 6 | - | - | - | - | - | - | 181 | 31 | 43 | 14 | 225 | 34 | | | | | | |
| 2 | 26 | 62 | 3 | 9 | 0 | 2 | 0 | 2 | 0 | 3 | 47 | 12 | 39 | 11 | 86 | 16 | | | | | | |
| 3 | 5 | 62 | 3 | 19 | - | - | - | - | - | - | 18 | 12 | 26 | 14 | 44 | 18 | | | | | | |
| 3 | 13 | 62 | 3 | 26 | - | - | - | - | - | - | 362 | 57 | 48 | 9 | 410 | 58 | | | | | | |
| 3 | 19 | 62 | 4 | 3 | - | - | - | - | - | - | 136 | 24 | 39 | 14 | 175 | 28 | | | | | | |
| 3 | 26 | 62 | 4 | 5 | 8 | 5 | 2 | 2 | 10 | 5 | 55 | 9 | 64 | 7 | 119 | 11 | | | | | | |
| 4 | 2 | 62 | 4 | 13 | - | - | - | - | - | - | 422 | 91 | 52 | 8 | 474 | 91 | | | | | | |
| 4 | 9 | 62 | 4 | 20 | - | - | - | - | - | - | 133 | 25 | 98 | 9 | 231 | 27 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 86 | 22 | 46 | 14 | 132 | 26 | | | | | | |
| 4 | 23 | 62 | 5 | 25 | 8 | 4 | 2 | 2 | 10 | 4 | 28 | 16 | 59 | 14 | 87 | 21 | | | | | | |
| 4 | 30 | 62 | 6 | 1 | - | - | - | - | - | - | 47 | 25 | 25 | 16 | 72 | 30 | | | | | | |
| 5 | 7 | 62 | 6 | 5 | - | - | - | - | - | - | 44 | 20 | 54 | 18 | 98 | 27 | | | | | | |
| 5 | 14 | 62 | 6 | 20 | - | - | - | - | - | - | 22 | 19 | 35 | 18 | 57 | 26 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | - | - | - | - | - | - | 63 | 18 | 27 | 14 | 90 | 23 | | | | | | |
| 5 | 28 | 62 | 6 | 28 | 41 | 1 | 2 | 1 | 43 | 1 | 621 | 62 | 51 | 14 | 672 | 64 | | | | | | |
| 6 | 4 | 62 | 7 | 2 | - | - | - | - | - | - | 286 | 100 | 46 | 14 | 332 | 101 | | | | | | |
| 6 | 11 | 62 | 7 | 9 | - | - | - | - | - | - | 736 | 135 | 43 | 9 | 779 | 135 | | | | | | |
| 6 | 18 | 62 | 7 | 10 | - | - | - | - | - | - | 565 | 88 | 61 | 15 | 626 | 89 | | | | | | |
| 6 | 26 | 62 | 7 | 27 | 27 | 86 | 2 | 2 | 29 | 86 | 106 | 29 | 54 | 17 | 160 | 34 | | | | | | |
| 7 | 2 | 62 | 8 | 6 | - | - | - | - | - | - | 103 | 60 | 45 | 12 | 148 | 61 | | | | | | |
| 7 | 9 | 62 | 8 | 13 | - | - | - | - | - | - | 65 | 3 | 46 | 11 | 111 | 11 | | | | | | |
| 7 | 16 | 62 | 8 | 14 | - | - | - | - | - | - | 102 | 26 | 63 | 15 | 165 | 30 | | | | | | |
| 7 | 23 | 62 | 8 | 20 | 1 | 1 | 0 | 1 | 1 | 1 | 25 | 6 | 40 | 7 | 65 | 9 | | | | | | |
| 7 | 29 | 62 | 8 | 22 | - | - | - | - | - | - | 275 | 104 | 35 | 14 | 310 | 105 | | | | | | |
| 8 | 6 | 62 | 8 | 28 | - | - | - | - | - | - | 56 | 21 | 45 | 15 | 101 | 26 | | | | | | |
| 8 | 13 | 62 | 8 | 29 | - | - | - | - | - | - | 111 | 68 | 51 | 15 | 162 | 70 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** MISSOURI
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER
**STATION LOCATION** MISSOURI RIVER AT
ST. JOSEPH, MISSOURI 30

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 8 | 20 | 62 | 9 | 5 | – | – | – | – | – | – | 41 | 66 | 85 | 20 | 126 | 69 | | | | | | |
| 8 | 27 | 62 | 9 | 19 | 4 | 7 | 5 | 4 | 9 | 8 | 336 | 80 | 57 | 20 | 393 | 82 | | | | | | |
| 9 | 4 | 62 | 10 | 2 | – | – | – | – | – | – | 275 | 149 | 36 | 15 | 311 | 150 | | | | | | |
| 9 | 10 | 62 | 10 | 8 | – | – | – | – | – | – | 135 | 76 | 50 | 15 | 185 | 78 | | | | | | |
| 9 | 17 | 62 | 10 | 9 | – | – | – | – | – | – | 138 | 71 | 33 | 15 | 171 | 73 | | | | | | |
| 9 | 21 | 62 | 10 | 16 | 5 | 4 | 3 | 3 | 8 | 5 | 29 | 18 | 75 | 17 | 104 | 25 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** MISSOURI

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT

ST. JOSEPH, MISSOURI 30

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 4 | 61 | 600 | 0 | 0 | 20 | 0 | 20 | 20 | 310 | 270 | 250 | 420 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 4100 | 0 | 0 | 270 | 0 | 230 | 0 | 1640 | 1990 | 290 | 730 | | | | | | | | | | | | | | | | | | | | |
| 11 | 7 | 61 | 2600 | 0 | 0 | 90 | 0 | 180 | 20 | 1610 | 670 | 630 | 870 | 71 | 4 | 57 | 1 | 84 | 1 | | | | | | | | | | | | | | |
| 11 | 14 | 61 | 4700 | 20 | 20 | 210 | 0 | 290 | 0 | 3020 | 1120 | 330 | 290 | 92 | 2 | 57 | 1 | 97 | 1 | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 3200 | 0 | 20 | 110 | 0 | 200 | 90 | 2370 | 420 | 470 | 690 | 71 | 4 | 57 | 1 | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 600 | 0 | 0 | 0 | 0 | 100 | 0 | 270 | 250 | 100 | 100 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 700 | 0 | 0 | 0 | 0 | 90 | 0 | 580 | 20 | 50 | 50 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 400 | 0 | 0 | 0 | 0 | 20 | 0 | 270 | 60 | 0 | 0 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 4 | 62 | 1100 | 0 | 0 | 20 | 0 | 0 | 0 | 100 | 1010 | 0 | 150 | 91 | 2 | 88 | 1 | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 500 | 0 | 0 | 20 | 0 | 20 | 0 | 0 | 490 | 0 | 620 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 500 | 0 | 0 | 0 | 0 | 40 | 230 | 100 | 100 | 40 | 100 | 63 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 300 | 0 | 0 | 20 | 0 | 20 | 0 | 50 | 230 | 0 | 90 | 88 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 1000 | 0 | 0 | 20 | 0 | 0 | 0 | 270 | 660 | 20 | 230 | 68 | 1 | 88 | 1 | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 1400 | 0 | 0 | 50 | 0 | 200 | 0 | 840 | 290 | 140 | 290 | 68 | 1 | 71 | 1 | | | | | | | | | | | | | | | | |
| 5 | 9 | 62 | 8100 | 0 | 0 | 1200 | 0 | 80 | 60 | 3560 | 3210 | 1350 | 290 | 71 | 4 | 73 | 3 | 92 | 3 | 38 | 2 | 68 | 2 | 25 | 2 | 91 | 2 | 77 | 1 | 88 | 1 | | |
| 5 | 21 | 62 | 18100 | 20 | 540 | 2630 | 0 | 910 | 0 | 7950 | 6040 | 3020 | 250 | 71 | 6 | 92 | 4 | 77 | 4 | 38 | 4 | 88 | 3 | 68 | 3 | 91 | 3 | 25 | 3 | 51 | 2 | 11 | 2 |
| 6 | 6 | 62 | 2200 | 0 | 20 | 60 | 0 | 20 | 60 | 190 | 1840 | 0 | 210 | 77 | 2 | 92 | 2 | 88 | 2 | | | | | | | | | | | | | | |
| 6 | 20 | 62 | 1600 | 0 | 0 | 150 | 0 | 310 | 0 | 370 | 770 | 60 | 40 | 57 | 1 | 71 | 1 | 88 | 1 | 69 | 1 | | | | | | | | | | | | |
| 7 | 2 | 62 | 700 | 50 | 90 | 130 | 0 | 50 | 0 | 290 | 90 | 50 | 50 | | | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 1100 | 0 | 40 | 100 | 40 | 190 | 0 | 410 | 330 | 40 | 40 | 69 | 1 | 71 | 1 | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 4300 | 100 | 0 | 520 | 0 | 270 | 20 | 2070 | 1300 | 1490 | 330 | 71 | 3 | 68 | 2 | 69 | 2 | 38 | 2 | 88 | 1 | 51 | 1 | | | | | | | | |
| 8 | 20 | 62 | 7000 | 270 | 0 | 1660 | 0 | 750 | 80 | 3190 | 1040 | 1620 | 370 | 71 | 4 | 69 | 3 | 68 | 3 | 38 | 3 | 51 | 3 | 88 | 2 | 25 | 1 | 3 | 1 | 29 | 1 | 24 | 1 |
| 9 | 3 | 62 | 800 | 40 | 0 | 0 | 0 | 40 | 0 | 330 | 410 | 40 | 40 | 88 | 1 | 68 | 1 | 69 | 1 | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 9200 | 80 | 40 | 1780 | 210 | 660 | 0 | 4200 | 2190 | 3110 | 540 | 71 | 5 | 68 | 3 | 38 | 3 | 51 | 3 | 25 | 2 | 88 | 2 | 69 | 1 | 24 | 1 | 50 | 1 | 87 | 1 |

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT

ST. JOSEPH, MISSOURI 030

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | PROTOZOA (Identifiable) Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | | |
| | | | | | | | | | | | | | | | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | NUMBER PER LITER | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | NUMBER PER LITER | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| 10 | 4 | 61 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 46 | 13 | 71 | 12 | 78 | 7 | 74 | 6 | 62 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 11 | 7 | 61 | 92 | 15 | 71 | 15 | 46 | 13 | 80 | 8 | 49 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 14 | 61 | 92 | 33 | 46 | 10 | 47 | 10 | 78 | 9 | 38 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 46 | 19 | 71 | 9 | 92 | 9 | 78 | 9 | 54 | 50 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 12 | 18 | 61 | 46 | 37 | 80 | 14 | 71 | 5 | 78 | 4 | 40 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 1 | 2 | 62 | 46 | 16 | 80 | 9 | 71 | 8 | 92 | 7 | 60 | 0 | 0 | 13 | 21 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | | | | | | | | | | 0 | 0 | 1 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 2 | 4 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | | | | | | | | | | 150 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 71 | 29 | 48 | 9 | 54 | 6 | 84 | 4 | 52 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 26 | 14 | 71 | 12 | 74 | 8 | 73 | 6 | 60 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 26 | 9 | 80 | 9 | 92 | 8 | 46 | 6 | 68 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 9 | 62 | 80 | 39 | 92 | 16 | 3 | 15 | 26 | 7 | 23 | 0 | 0 | 0 | | | | | | | | | | | 26 | 50 | 3 | 76 | 2 | 77 | 1 | 0 | 0 |
| 5 | 21 | 62 | 80 | 29 | 9 | 27 | 92 | 11 | 26 | 5 | 28 | 0 | 0 | 34 | 2 | 3 | 11 | 1 | | | | | | | 11 | 76 | 1 | 77 | 1 | | | 0 | 0 |
| 6 | 6 | 62 | 92 | 25 | 71 | 24 | 47 | 9 | 48 | 7 | 35 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 20 | 62 | 9 | 15 | 46 | 13 | 71 | 9 | 92 | 9 | 54 | 100 | 0 | 1 | | | | | | | | | | | 4 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 71 | 17 | 92 | 15 | 46 | 12 | 26 | 6 | 50 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 58 | 49 | 71 | 10 | 80 | 6 | 92 | 3 | 32 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 6 | 62 | 58 | 29 | 80 | 16 | 26 | 8 | 56 | 7 | 40 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 20 | 62 | 56 | 72 | 80 | 7 | 56 | 5 | 26 | 3 | 13 | 20 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 9 | 3 | 62 | 65 | 12 | 26 | 11 | 58 | 10 | 92 | 6 | 61 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 9 | 17 | 62 | 80 | 40 | 26 | 18 | 82 | 9 | 58 | 8 | 25 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |

### RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVE

**STATION LOCATION** MISSOURI RIVER AT

ST. JOSEPH, MISSOURI

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 7 | 61 | 10 | 20 | 5528 | 112 | 22 | 90 | 0 | 5 | 8 | 1 | 1 | 5 | 1 | 3 | 2 | 1 | 3 |
| 11 | 20 | 61 | 12 | 7 | 3247 | 257 | 41 | 216 | 1 | 10 | 16 | 2 | 1 | 13 | 0 | 6 | 2 | 1 | 5 |
| 1 | 9 | 62 | 1 | 19 | 5250 | 158 | 25 | 133 | 2 | 7 | 8 | 1 | 1 | 6 | 0 | 3 | 1 | 0 | 4 |
| 2 | 15 | 62 | 2 | 27 | 4552 | 163 | 35 | 128 | 1 | 7 | 12 | 1 | 1 | 9 | 1 | 4 | 3 | 0 | 8 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 4 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 30000 |
| 10 | 9 | 61 | 13.8 | 8.2 | 7.9 | 1.5 | - | - | - | .1 | 20 | 180 | 224 | - | 180 | - | .2 | - | 37000 |
| 10 | 16 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 43000 |
| 10 | 18 | 61 | 15.0 | 8.1 | 8.7 | 1.9 | - | - | - | .1 | 25 | 192 | 230 | - | 430 | 124 | .2 | 470 | - |
| 10 | 20 | 61 | - | - | - | - | 37 | - | - | - | - | - | - | - | - | - | - | - | - |
| 10 | 23 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 37000 |
| 10 | 30 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 130000 |
| 11 | 3 | 61 | 11.1 | 7.9 | 7.7 | 1.6 | - | - | - | .3 | 30 | 176 | 200 | - | 1000 | 95 | .2 | 371 | - |
| 11 | 6 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 74000 |
| 11 | 14 | 61 | 1.1 | - | 7.9 | - | - | - | - | .2 | 30 | 216 | 254 | - | 160 | 114 | - | 472 | - |
| 11 | 21 | 61 | 2.8 | - | 7.9 | - | - | - | - | - | 35 | 192 | 260 | - | 350 | 93 | - | 450 | - |
| 11 | 28 | 61 | 5.0 | - | - | - | - | - | - | - | 30 | 160 | 479 | - | 220 | 109 | - | 479 | - |
| 12 | 5 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 24000 |
| 12 | 7 | 61 | - | - | - | - | 7 | - | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 11 | 61 | 1.1 | 11.8 | - | - | - | 3.5 | 5.0 | .4 | 30 | 210 | 250 | - | 100 | - | .3 | - | 31000 |
| 12 | 18 | 61 | 1.1 | 10.6 | 7.7 | 2.4 | - | 3.5 | 5.0 | .6 | 36 | 270 | 310 | - | 35 | 276 | .2 | 549 | 1700 |
| 12 | 25 | 61 | 1.1 | 10.0 | 7.7 | 2.0 | - | 3.0 | 4.5 | .5 | 33 | 210 | 260 | - | 30 | - | .2 | 432 | 4700 |
| 1 | 3 | 62 | 1.1 | 9.6 | 7.8 | 2.2 | - | 4.0 | 6.2 | .5 | 37 | 216 | 260 | - | 25 | - | .3 | - | 100 |
| 1 | 9 | 62 | 1.1 | 10.6 | 7.8 | 2.7 | - | 4.6 | 5.5 | .8 | 30 | 202 | 252 | 0 | 25 | 121 | .4 | 468 | 100 |
| 1 | 15 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 550 |
| 1 | 17 | 62 | .6 | 9.7 | 8.0 | 8.1 | - | 3.4 | 4.8 | .3 | 35 | 220 | 276 | 0 | 25 | 160 | .2 | 488 | - |
| 1 | 19 | 62 | - | - | - | - | 8 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 23 | 62 | .6 | .8 | 8.0 | 2.0 | - | 3.5 | 4.8 | .4 | 38 | 218 | 274 | 0 | 25 | 162 | .1 | 541 | 600 |
| 1 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1400 |
| 2 | 1 | 62 | 1.1 | 9.8 | 7.7 | 2.2 | - | 4.5 | 6.5 | .5 | 34 | 170 | 212 | - | 400 | 115 | .3 | 377 | - |
| 2 | 2 | 62 | 1.1 | 9.4 | 7.7 | 2.4 | - | 4.0 | 5.5 | .4 | 32 | 156 | 196 | 0 | 480 | 100 | .1 | 381 | - |
| 2 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 39000 |
| 2 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1700 |
| 2 | 14 | 62 | 1.1 | 8.7 | 8.4 | 1.7 | - | 4.0 | 5.5 | .4 | 27 | 156 | 188 | - | 300 | 97 | .1 | 331 | - |
| 2 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 59000 |
| 2 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5100 |
| 3 | 1 | 62 | 1.1 | - | 7.8 | 2.8 | - | 4.0 | 5.8 | .4 | 28 | 188 | 236 | 0 | 65 | 103 | .2 | 435 | - |
| 3 | 5 | 62 | - | - | - | - | 12 | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 3 | 7 | 62 | 1.1 | 11.2 | 7.3 | 3.2 | - | - | - | .3 | 27 | 164 | 252 | - | 70 | 123 | .1 | 453 | - |
| 3 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 3 | 14 | 62 | 1.6 | - | 7.7 | - | - | 4.0 | 5.6 | .4 | 27 | 150 | 176 | - | 900 | 80 | .1 | 381 | - |
| 3 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 16000 |
| 3 | 21 | 62 | 4.4 | 9.8 | 7.2 | 2.0 | - | 3.8 | 5.6 | .3 | 24 | 140 | 160 | - | 2000 | 67 | .2 | 273 | - |
| 3 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 70000 |

NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** MISSOURI

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT

ST. JOSEPH, MISSOURI 30

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 4 | 2 | 62 | 5.5 | - | 7.4 | - | - | 4.6 | 6.5 | .4 | 23 | 108 | 128 | - | 1700 | 48 | - | - | 12000 |
| 4 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 300 |
| 4 | 17 | 62 | 7.2 | 9.0 | 7.9 | 3.0 | - | - | - | .4 | 24 | 128 | 152 | 0 | 500 | - | .3 | 336 | 1100 |
| 4 | 23 | 62 | 8.5 | - | 8.2 | - | - | - | - | .3 | 20 | 168 | 196 | 0 | 400 | 120 | .2 | 355 | 800 |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *200 |
| 5 | 1 | 62 | 11.7 | - | 8.0 | - | - | - | - | .3 | 24 | 164 | 212 | 0 | 200 | - | .1 | 368 | - |
| 5 | 8 | 62 | - | - | - | - | - | - | - | .4 | 24 | 172 | 244 | - | 300 | 128 | .1 | 421 | 3400 |
| 5 | 14 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 6200 |
| 5 | 21 | 62 | 24.4 | 6.8 | 7.9 | - | - | - | - | .3 | 29 | 176 | 252 | - | 290 | 168 | .2 | 465 | 7000 |
| 5 | 29 | 62 | 25.0 | 7.0 | 7.8 | 2.8 | - | 4.0 | 5.6 | .2 | 25 | 180 | 240 | - | 12000 | 102 | .5 | 350 | - |
| 6 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5500 |
| 6 | 5 | 62 | 21.1 | 7.6 | 7.9 | 2.1 | - | - | - | .3 | 24 | 125 | 200 | - | 1830 | 91 | .2 | 366 | - |
| 6 | 11 | 62 | 21.1 | 6.8 | 7.6 | 2.5 | - | - | - | .2 | 23 | 132 | 156 | - | 6000 | 64 | .1 | 248 | 95000 |
| 6 | 18 | 62 | 21.0 | 7.8 | 7.9 | 2.1 | - | - | - | .2 | 27 | 174 | 228 | - | 800 | 107 | .1 | 439 | 7600 |
| 6 | 26 | 62 | 26.7 | 7.0 | 7.9 | 2.2 | - | - | - | .3 | 27 | 176 | 208 | 10 | 850 | 110 | .2 | 417 | 28000 |
| 7 | 3 | 62 | 26.7 | 6.6 | 7.8 | 2.4 | - | - | - | .4 | 24 | 164 | 216 | 15 | 1200 | 99 | .1 | 426 | 8000 |
| 7 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 8200 |
| 7 | 11 | 62 | 26.7 | 6.2 | 8.1 | 2.9 | - | 4.4 | - | .4 | 26 | 196 | 224 | 10 | 460 | 117 | .1 | 466 | - |
| 7 | 17 | 62 | 26.7 | 6.7 | 7.9 | 2.5 | - | - | - | .3 | 24 | 152 | 196 | - | 2750 | 86 | .2 | 340 | 15000 |
| 7 | 23 | 62 | 25.6 | 5.7 | 7.6 | 2.3 | - | - | - | .2 | 20 | 142 | 172 | 10 | 3000 | 98 | - | 327 | 6000 |
| 7 | 30 | 62 | 25.6 | 5.2 | 7.4 | 2.1 | - | - | - | .3 | 26 | 168 | 216 | - | 2600 | 117 | .2 | 393 | 7000 |
| 8 | 6 | 62 | 25.0 | 5.6 | 7.9 | 2.5 | - | - | - | .3 | 28 | 180 | 248 | 10 | 400 | 143 | .1 | 490 | - |
| 8 | 14 | 62 | 25.0 | 6.1 | 8.1 | 2.3 | - | - | - | .3 | 35 | 172 | 224 | 10 | 700 | 144 | .1 | 447 | 10000 |
| 8 | 20 | 62 | 25.0 | 6.2 | 8.1 | 2.1 | - | - | - | .3 | 36 | 174 | 236 | 8 | 260 | 170 | .3 | 472 | 1000 |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 12000 |
| 9 | 5 | 62 | 22.2 | 6.9 | 8.0 | 3.0 | - | - | - | .2 | 23 | 164 | 196 | 10 | 2440 | 134 | .1 | 364 | 23000 |
| 9 | 10 | 62 | 22.0 | 6.2 | 8.0 | 2.7 | - | - | - | .3 | 27 | 172 | 232 | 12 | 550 | 169 | .1 | 448 | 12000 |
| 9 | 20 | 62 | 21.6 | 7.0 | 8.3 | 2.2 | - | - | - | .3 | 37 | 174 | 232 | - | 350 | 181 | .1 | 549 | - |
| 9 | 25 | 62 | 21.6 | 7.4 | 8.2 | 2.6 | - | - | - | .2 | 39 | 170 | 252 | - | 300 | - | .1 | - | 57000 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at St. Joseph, Missouri
Operated by U.S. Geological Survey

MAJOR BASIN Missouri River

MINOR BASIN Lower Missouri below Niobrara River

STATION LOCATION Missouri River at
St. Joseph, Missouri

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 51.600 | 22.500 | 18.800 | 15.800 | 24.000 | 19.200 | 134.000 | 37.300 | 59.000 | 52.400 | 41.600 | 79.600 |
| 2 | 46.000 | 22.500 | 18.800 | 16.000 | 24.000 | 19.200 | 134.000 | 35.100 | 48.000 | 52.000 | 38.200 | 60.400 |
| 3 | 40.600 | 24.900 | 19.000 | 16.200 | 27.600 | 18.500 | 122.000 | 33.900 | 51.200 | 48.400 | 37.000 | 43.000 |
| 4 | 37.000 | 26.100 | 18.800 | 16.200 | 33.000 | 18.000 | 113.000 | 33.600 | 60.800 | 48.000 | 34.200 | 37.300 |
| 5 | 34.800 | 23.200 | 18.500 | 16.400 | 33.900 | 17.500 | 108.000 | 33.600 | 62.600 | 47.200 | 35.400 | 40.900 |
| 6 | 33.900 | 20.800 | 18.700 | 16.400 | 29.900 | 17.500 | 97.200 | 33.600 | 56.800 | 48.800 | 37.600 | 43.400 |
| 7 | 33.600 | 19.800 | 17.700 | 16.600 | 27.300 | 17.600 | 89.600 | 35.100 | 56.400 | 52.400 | 36.300 | 41.200 |
| 8 | 33.600 | 19.400 | 17.300 | 16.000 | 28.000 | 17.600 | 84.200 | 34.500 | 61.300 | 55.000 | 36.000 | 37.900 |
| 9 | 33.900 | 19.000 | 17.300 | 16.000 | 29.400 | 23.500 | 81.200 | 33.600 | 65.500 | 53.600 | 35.100 | 36.000 |
| 10 | 38.900 | 17.900 | 17.700 | 15.200 | 29.600 | 27.000 | 79.000 | 33.900 | 97.200 | 52.800 | 35.400 | 37.300 |
| 11 | 68.000 | 18.100 | 16.000 | 13.500 | 28.600 | 31.800 | 45.200 | 33.600 | 94.600 | 50.400 | 35.700 | 38.900 |
| 12 | 52.400 | 18.300 | 12.600 | 13.500 | 31.000 | 46.400 | 69.500 | 33.600 | 84.200 | 49.600 | 36.600 | 38.200 |
| 13 | 50.800 | 18.300 | 8.520 | 14.100 | 33.600 | 37.300 | 67.000 | 33.600 | 70.500 | 50.400 | 33.000 | 35.700 |
| 14 | 36.600 | 18.300 | 7.610 | 15.500 | 33.000 | 31.000 | 62.200 | 33.600 | 63.600 | 47.200 | 31.000 | 33.600 |
| 15 | 29.900 | 18.800 | 7.940 | 16.000 | 42.000 | 28.600 | 57.200 | 34.200 | 56.800 | 51.600 | 30.700 | 34.500 |
| 16 | 26.300 | 37.600 | 8.520 | 16.800 | 47.200 | 28.000 | 52.800 | 33.600 | 53.600 | 57.200 | 31.300 | 36.600 |
| 17 | 23.600 | 36.600 | 9.380 | 16.800 | 39.600 | 27.600 | 48.400 | 33.300 | 51.600 | 48.000 | 30.400 | 34.500 |
| 18 | 21.100 | 27.600 | 10.300 | 16.800 | 42.000 | 28.000 | 45.600 | 33.300 | 49.200 | 47.600 | 31.800 | 35.700 |
| 19 | 19.600 | 24.900 | 11.700 | 16.600 | 40.200 | 34.500 | 43.700 | 36.300 | 53.600 | 48.400 | 33.900 | 35.700 |
| 20 | 19.000 | 23.400 | 14.000 | 15.800 | 37.600 | 47.200 | 41.200 | 38.600 | 66.000 | 66.500 | 33.000 | 34.200 |
| 21 | 18.300 | 22.700 | 15.700 | 15.000 | 33.600 | 52.800 | 40.900 | 38.900 | 64.500 | 76.300 | 33.000 | 34.200 |
| 22 | 17.900 | 22.700 | 15.700 | 15.200 | 30.200 | 52.400 | 38.600 | 47.600 | 59.000 | 79.600 | 33.300 | 34.200 |
| 23 | 17.500 | 23.000 | 15.200 | 15.500 | 27.300 | 55.400 | 38.600 | 54.600 | 67.000 | 84.200 | 33.000 | 33.900 |
| 24 | 17.300 | 23.400 | 14.800 | 15.800 | 25.400 | 66.000 | 38.900 | 53.600 | 68.000 | 63.600 | 37.600 | 34.800 |
| 25 | 17.300 | 23.000 | 15.700 | 16.200 | 24.900 | 87.200 | 36.600 | 52.800 | 63.100 | 54.100 | 39.900 | 34.500 |
| 26 | 17.100 | 21.900 | 16.800 | 17.000 | 24.000 | 86.000 | 34.800 | 49.600 | 58.600 | 48.000 | 38.900 | 34.200 |
| 27 | 16.800 | 20.600 | 17.700 | 18.500 | 21.200 | 95.300 | 35.700 | 48.400 | 55.900 | 43.000 | 35.700 | 34.500 |
| 28 | 16.600 | 19.800 | 17.900 | 23.800 | 19.400 | 102.000 | 36.000 | 57.700 | 52.000 | 39.900 | 34.200 | 33.900 |
| 29 | 17.500 | 19.200 | 17.500 | 23.800 |  | 112.000 | 37.000 | 124.000 | 49.600 | 51.600 | 33.000 | 32.700 |
| 30 | 25.400 | 19.200 | 16.600 | 21.700 |  | 123.000 | 37.600 | 126.000 | 50.400 | 50.000 | 32.700 | 35.400 |
| 31 | 26.100 |  | 15.800 | 24.000 |  | 132.000 |  | 81.800 |  | 46.400 | 37.900 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** NEBRASKA

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVE

**STATION LOCATION** MISSOURI RIVER AT
OMAHA, NEBRASKA

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 14 | - | - | - | - | - | - | 27 | 17 | 46 | 16 | 73 | 23 | | | | | | |
| 10 | 9 | 61 | 10 | 31 | - | - | - | - | - | - | 6 | 16 | 6 | 15 | 12 | 22 | | | | | | |
| 10 | 16 | 61 | 10 | 31 | - | - | - | - | - | - | 33 | 15 | 32 | 15 | 65 | 21 | | | | | | |
| 10 | 23 | 61 | 11 | 2 | 2 | 1 | 6 | 3 | 8 | 3 | 1 | 9 | 34 | 12 | 35 | 15 | | | | | | |
| 10 | 30 | 61 | 11 | 10 | - | - | - | - | - | - | 13 | 14 | 30 | 15 | 43 | 21 | | | | | | |
| 11 | 6 | 61 | 11 | 27 | - | - | - | - | - | - | 133 | 16 | 71 | 15 | 204 | 22 | | | | | | |
| 11 | 13 | 61 | 11 | 24 | - | - | - | - | - | - | 24 | 10 | 148 | 17 | 172 | 20 | | | | | | |
| 11 | 20 | 61 | 11 | 29 | - | - | - | - | - | - | 19 | 11 | 51 | 16 | 70 | 19 | | | | | | |
| 11 | 27 | 61 | 12 | 7 | 0 | 1 | 2 | 3 | 2 | 3 | 6 | 9 | 41 | 12 | 47 | 15 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | - | - | - | - | - | - | 3 | 12 | 41 | 16 | 44 | 20 | | | | | | |
| 12 | 11 | 61 | 12 | 22 | - | - | - | - | - | - | 1 | 9 | 23 | 12 | 24 | 15 | | | | | | |
| 12 | 18 | 61 | 12 | 27 | - | - | - | - | - | - | 5 | 9 | 25 | 11 | 30 | 14 | | | | | | |
| 12 | 25 | 61 | 1 | 3 | 1 | 1 | 2 | 3 | 3 | 3 | 2 | 11 | 24 | 12 | 26 | 16 | | | | | | |
| 1 | 2 | 62 | 1 | 10 | - | - | - | - | - | - | 6 | 12 | 28 | 15 | 34 | 19 | | | | | | |
| 1 | 8 | 62 | 1 | 19 | - | - | - | - | - | - | 5 | 13 | 10 | 15 | 15 | 20 | | | | | | |
| 1 | 15 | 62 | 1 | 25 | - | - | - | - | - | - | 23 | 16 | 44 | 16 | 67 | 23 | | | | | | |
| 1 | 22 | 62 | 2 | 2 | 0 | 1 | 5 | 4 | 5 | 4 | 4 | 9 | 20 | 12 | 24 | 15 | | | | | | |
| 1 | 29 | 62 | 2 | 6 | - | - | - | - | - | - | 5 | 12 | 16 | 14 | 21 | 18 | | | | | | |
| 2 | 5 | 62 | 2 | 15 | - | - | - | - | - | - | 15 | 13 | 21 | 15 | 36 | 20 | | | | | | |
| 2 | 12 | 62 | 2 | 23 | - | - | - | - | - | - | 3 | 11 | 24 | 15 | 27 | 19 | | | | | | |
| 2 | 19 | 62 | 3 | 5 | - | - | - | - | - | - | 46 | 16 | 65 | 15 | 111 | 22 | | | | | | |
| 2 | 26 | 62 | 3 | 14 | 1 | 1 | 3 | 3 | 4 | 3 | 10 | 12 | 47 | 15 | 57 | 19 | | | | | | |
| 3 | 5 | 62 | 3 | 16 | - | - | - | - | - | - | 11 | 12 | 39 | 15 | 50 | 19 | | | | | | |
| 3 | 12 | 62 | 3 | 30 | - | - | - | - | - | - | 64 | 9 | 94 | 12 | 158 | 15 | | | | | | |
| 3 | 19 | 62 | 4 | 3 | - | - | - | - | - | - | 18 | 10 | 47 | 12 | 65 | 16 | | | | | | |
| 3 | 26 | 62 | 4 | 9 | 41 | 49 | 0 | 3 | 41 | 49 | 532 | 94 | 37 | 8 | 569 | 94 | | | | | | |
| 4 | 2 | 62 | 4 | 19 | - | - | - | - | - | - | 242 | 56 | 61 | 8 | 303 | 57 | | | | | | |
| 4 | 9 | 62 | 4 | 25 | - | - | - | - | - | - | 177 | 46 | 11 | 7 | 188 | 47 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 38 | 11 | 63 | 9 | 101 | 14 | | | | | | |
| 4 | 23 | 62 | 5 | 23 | 1 | 5 | 2 | 2 | 3 | 5 | 62 | 25 | 38 | 17 | 100 | 30 | | | | | | |
| 4 | 30 | 62 | 6 | 1 | - | - | - | - | - | - | 42 | 20 | 44 | 17 | 86 | 26 | | | | | | |
| 5 | 7 | 62 | 6 | 11 | - | - | - | - | - | - | 20 | 18 | 32 | 18 | 52 | 25 | | | | | | |
| 5 | 14 | 62 | 6 | 21 | - | - | - | - | - | - | 35 | 21 | 30 | 18 | 65 | 28 | | | | | | |
| 5 | 21 | 62 | 7 | 26 | - | - | - | - | - | - | 95 | 67 | 28 | 15 | 123 | 69 | | | | | | |
| 5 | 28 | 62 | 6 | 28 | 39 | 22 | 1 | 2 | 40 | 22 | 287 | 62 | 46 | 15 | 333 | 64 | | | | | | |
| 6 | 4 | 62 | 7 | 2 | - | - | - | - | - | - | 192 | 82 | 55 | 15 | 247 | 83 | | | | | | |
| 6 | 11 | 62 | 7 | 9 | - | - | - | - | - | - | 471 | 102 | 59 | 16 | 530 | 103 | | | | | | |
| 6 | 18 | 62 | 7 | 19 | - | - | - | - | - | - | 296 | 102 | 63 | 15 | 359 | 103 | | | | | | |
| 6 | 25 | 62 | 8 | 14 | 4 | 8 | 2 | 2 | 6 | 8 | 32 | 65 | 106 | 17 | 138 | 67 | | | | | | |
| 7 | 2 | 62 | 7 | 31 | - | - | - | - | - | - | 44 | 24 | 49 | 19 | 93 | 31 | | | | | | |
| 7 | 9 | 62 | 8 | 6 | - | - | - | - | - | - | 102 | 64 | 40 | 12 | 142 | 65 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** NEBRASKA

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT
OMAHA, NEBRASKA

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 7 | 16 | 62 | 8 | 23 | - | - | - | - | - | - | 138 | 31 | 46 | 17 | 184 | 35 | | | | | | | |
| 7 | 23 | 62 | 8 | 15 | 6 | 8 | 1 | 2 | 7 | 8 | 96 | 25 | 46 | 15 | 142 | 29 | | | | | | | |
| 7 | 30 | 62 | 9 | 20 | - | - | - | - | - | - | 70 | 20 | 63 | 15 | 133 | 25 | | | | | | | |
| 8 | 6 | 62 | 8 | 17 | - | - | - | - | - | - | 48 | 18 | 43 | 16 | 91 | 24 | | | | | | | |
| 8 | 13 | 62 | 8 | 30 | - | - | - | - | - | - | 99 | 65 | 40 | 15 | 139 | 67 | | | | | | | |
| 8 | 20 | 62 | 8 | 31 | - | - | - | - | - | - | 45 | 61 | 40 | 16 | 85 | 63 | | | | | | | |
| 8 | 27 | 62 | 9 | 13 | 4 | 7 | 6 | 3 | 10 | 8 | 28 | 47 | 42 | 18 | 70 | 50 | | | | | | | |
| 9 | 3 | 62 | 9 | 28 | - | - | - | - | - | - | 229 | 156 | 39 | 18 | 268 | 157 | | | | | | | |
| 9 | 10 | 62 | 10 | 2 | - | - | - | - | - | - | 18 | 40 | 28 | 18 | 46 | 44 | | | | | | | |
| 9 | 17 | 62 | 10 | 9 | - | - | - | - | - | - | 54 | 35 | 35 | 16 | 89 | 38 | | | | | | | |
| 9 | 24 | 62 | 10 | 18 | 3 | 4 | 3 | 3 | 6 | 5 | 24 | 17 | 32 | 15 | 56 | 23 | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** NEBRASKA

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT
OMAHA, NEBRASKA

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 1600 | 0 | 0 | 130 | 0 | 170 | 0 | 930 | 390 | 40 | 80 | 71 | 3 | 69 | 1 | | | | | | | | | | | | | | | | |
| 10 | 23 | 61 | 8200 | 0 | 40 | 290 | 0 | 540 | 20 | 6770 | 520 | 540 | 120 | 71 | 6 | 68 | 2 | 69 | 2 | 51 | 1 | 57 | 1 | | | | | | | | | | |
| 11 | 6 | 61 | 7200 | 0 | 0 | 290 | 0 | 310 | 0 | 6130 | 440 | 600 | 40 | 71 | 2 | 38 | 1 | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 2300 | 0 | 0 | 20 | 0 | 80 | 0 | 1970 | 270 | 150 | 20 | 71 | 7 | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 2400 | 0 | 0 | 40 | 0 | 60 | 20 | 1970 | 290 | 20 | 40 | 71 | 4 | 68 | 2 | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 3300 | 60 | 0 | 310 | 0 | 640 | 0 | 2030 | 250 | 620 | 0 | 71 | 4 | 51 | 2 | 57 | 1 | 69 | 1 | 68 | 1 | 35 | 1 | | | | | | | | |
| 1 | 2 | 62 | 200 | 0 | 0 | 0 | 0 | 60 | 0 | 80 | 20 | 80 | 0 | | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 500 | 0 | 0 | 0 | 0 | 40 | 0 | 330 | 100 | 40 | 20 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 2700 | 0 | 20 | 20 | 0 | 190 | 0 | 2260 | 210 | 150 | 0 | 71 | 4 | 68 | 1 | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 3300 | 170 | 0 | 60 | 0 | 370 | 0 | 2380 | 330 | 250 | 150 | 71 | 3 | 68 | 3 | 51 | 2 | 92 | 1 | 3 | 1 | | | | | | | | | | |
| 3 | 5 | 62 | 500 | 0 | 0 | 0 | 0 | 0 | 60 | 170 | 230 | 40 | 0 | 88 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 500 | 0 | 0 | 0 | 0 | 0 | 20 | 100 | 370 | 60 | 120 | | | | | | | | | | | | | | | | | | | | |
| 4 | 3 | 62 | 1100 | 0 | 0 | 20 | 0 | 40 | 0 | 560 | 480 | 230 | 120 | 69 | 2 | 68 | 1 | 88 | 1 | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 700 | 0 | 0 | 0 | 0 | 60 | 0 | 440 | 170 | 320 | 150 | 68 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 15800 | 40 | 300 | 2890 | 110 | 110 | 270 | 9830 | 2220 | 4490 | 320 | 71 | 6 | 24 | 4 | 88 | 3 | 68 | 2 | 38 | 2 | 91 | 2 | 92 | 2 | 17 | 1 | 65 | 1 | 44 | 1 |
| 5 | 21 | 62 | 1200 | 0 | 0 | 60 | 0 | 0 | 0 | 630 | 460 | 170 | 380 | 71 | 2 | 77 | 1 | | | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 2200 | 0 | 80 | 40 | 0 | 60 | 0 | 290 | 1760 | 20 | 20 | 77 | 3 | 88 | 1 | 92 | 1 | 71 | 1 | | | | | | | | | | | | |
| 6 | 19 | 62 | 1000 | 0 | 20 | 40 | 0 | 290 | 0 | 290 | 330 | 20 | 0 | 57 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 900 | 0 | 0 | 60 | 0 | 40 | 0 | 270 | 500 | 20 | 20 | 71 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 1000 | 0 | 160 | 90 | 0 | 0 | 0 | 590 | 200 | 430 | 410 | 69 | 2 | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 4700 | 120 | 20 | 520 | 120 | 500 | 0 | 2650 | 750 | 2900 | 120 | 71 | 3 | 68 | 3 | 51 | 2 | 69 | 2 | 38 | 1 | 88 | 1 | | | | | | | | |
| 8 | 20 | 62 | 6500 | 170 | 0 | 350 | 80 | 560 | 0 | 4680 | 620 | 660 | 40 | 71 | 5 | 69 | 3 | 51 | 2 | 68 | 2 | 38 | 1 | 88 | 1 | 3 | 1 | | | | | | |
| 9 | 4 | 62 | 10600 | 0 | 0 | 460 | 0 | 250 | 170 | 5280 | 4390 | 1770 | 840 | 71 | 5 | 68 | 4 | 88 | 4 | 86 | 2 | 97 | 2 | 81 | 2 | 91 | 2 | 87 | 2 | 38 | 2 | 51 | 1 |
| 9 | 17 | 62 | 3000 | 40 | 0 | 170 | 0 | 230 | 0 | 1950 | 620 | 500 | 40 | 71 | 4 | 68 | 2 | 51 | 1 | 38 | 1 | | | | | | | | | | | | |

**STATION LOCATION** MISSOURI RIVER AT

OMAHA, NEBRASKA 031

| DATE OF SAMPLE |  |  | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) |  |  |  |  |  |  |  |  | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  | 1ST |  | 2ND |  | 3RD |  | 4TH |  | OTHER SPECIES PERCENT |  | PROTOZOA (Identifiable) Number per ml. | ROTIFERS |  |  |  |  |  |  |  |  |  |  | CRUSTACEA |  |  |  |  |  |  | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT |  |  |  | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) |  |  |  |  |  |  |  |  |  | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1ST |  | 2ND |  | 3RD |  | 4TH |  | 5TH |  |  | 1ST |  | 2ND |  | 3RD |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |  | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |  |  |
| 10 | 2 | 61 | 80 | 23 | 83 | 20 | 26 | 8 | 75 | 5 | 44 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 10 | 23 | 61 | 80 | 51 | 82 | 23 | 26 | 6 | 71 | 4 | 16 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 11 | 6 | 61 | 82 | 64 | 80 | 15 | 26 | 7 | 71 | 2 | 12 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 11 | 20 | 61 |  |  |  |  |  |  |  |  |  | 0 | 0 | 6 |  |  |  |  |  |  |  |  |  |  | 6 |  |  |  |  |  |  | 0 | 1 |
| 12 | 4 | 61 | 71 | 18 | 82 | 12 | 86 | 6 | 80 | 6 | 58 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 12 | 18 | 61 | 82 | 16 | 71 | 16 | 70 | 10 | 86 | 8 | 50 | 60 | 10 | 27 | 21 | 2 | 17 | 1 |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 1 | 2 | 62 |  |  |  |  |  |  |  |  |  | 0 | 0 | 2 |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  | 0 | 0 |
| 1 | 15 | 62 |  |  |  |  |  |  |  |  |  | 0 | 0 | 2 |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  | 0 | 0 |
| 2 | 5 | 62 |  |  |  |  |  |  |  |  |  | 80 | 0 | 2 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  | 0 | 0 |
| 2 | 19 | 62 |  |  |  |  |  |  |  |  |  | 310 | 0 | 1 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  | 0 | 0 |
| 3 | 5 | 62 | 71 | 30 | 86 | 12 | 82 | 9 | 88 | 8 | 41 | 20 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 3 | 19 | 62 | 71 | 19 | 82 | 13 | 86 | 12 | 85 | 11 | 45 | 20 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 4 | 3 | 62 | 26 | 20 | 92 | 10 | 71 | 8 | 75 | 6 | 56 | 60 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 4 | 16 | 62 | 26 | 24 | 71 | 10 | 56 | 7 | 86 | 6 | 53 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  | 0 | 0 |
| 5 | 7 | 62 | 80 | 46 | 9 | 18 | 82 | 17 | 26 | 4 | 15 | 150 | 0 | 64 | 2 | 3 | 11 | 3 | 21 | 1 |  |  |  |  | 80 | 50 | 5 | 76 | 4 | 77 | 2 | 1 | 0 |
| 5 | 21 | 62 | 9 | 53 | 92 | 12 | 71 | 6 | 80 | 3 | 26 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 6 | 4 | 62 | 9 | 45 | 92 | 11 | 71 | 7 | 80 | 7 | 30 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 6 | 19 | 62 | 80 | 17 | 9 | 13 | 92 | 9 | 71 | 7 | 54 | 0 | 0 | 1 |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  | 0 | 0 |
| 7 | 2 | 62 | 92 | 23 | 71 | 13 | 83 | 10 | 80 | 8 | 46 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 7 | 16 | 62 | 58 | 33 | 71 | 8 | 9 | 7 | 26 | 7 | 45 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 8 | 6 | 62 | 80 | 28 | 58 | 26 | 26 | 21 | 56 | 11 | 14 | 0 | 0 | 18 | 17 | 1 | 2 | 1 |  |  |  |  |  |  | 2 |  |  |  |  |  |  | 0 | 0 |
| 8 | 20 | 62 | 58 | 50 | 80 | 31 | 56 | 10 | 26 | 4 | 5 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 9 | 4 | 62 | 58 | 37 | 26 | 7 | 80 | 7 | 71 | 6 | 43 | 0 | 0 | - |  |  |  |  |  |  |  |  |  |  | - |  |  |  |  |  |  | - | - |
| 9 | 17 | 62 | 80 | 37 | 82 | 26 | 26 | 7 | 58 | 6 | 24 | 40 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |

***RESULTS IN MICROGRAMS PER LITER***
*(Parts per billion)*

**STATION LOCATION** MISSOURI RIVER AT
OMAHA, NEBRASKA 31

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 10 | 23 | 61 | 11 | 6 | 3802 | 222 | 49 | 173 | 2 | 11 | 14 | 1 | 1 | 12 | 0 | 6 | 3 | 1 | 12 |
| 11 | 20 | 61 | 12 | 4 | 3352 | 224 | 47 | 177 | 0 | 7 | 25 | 4 | 3 | 16 | 2 | 10 | 2 | 1 | 2 |
| 12 | 18 | 61 | 1 | 2 | 4666 | 144 | 35 | 109 | 1 | 13 | 10 | 1 | 1 | 8 | 0 | 4 | 3 | 1 | 3 |
| 1 | 15 | 62 | 1 | 29 | 4335 | 217 | 32 | 185 | 1 | 9 | 10 | 1 | 1 | 8 | 0 | 4 | 2 | 1 | 5 |
| 2 | 12 | 62 | 2 | 26 | 4118 | 242 | 74 | 168 | 4 | 14 | 25 | 1 | 1 | 23 | 0 | 12 | 4 | 2 | 13 |
| 3 | 12 | 62 | 3 | 26 | 4525 | 178 | 53 | 125 | 1 | 12 | 19 | 1 | 1 | 16 | 1 | 9 | 4 | 1 | 7 |
| 4 | 9 | 62 | 4 | 23 | 4328 | 175 | 72 | 103 | 1 | 18 | 22 | 1 | 1 | 18 | 2 | 8 | 6 | 2 | 15 |
| 5 | 7 | 62 | 5 | 21 | 3695 | 136 | 45 | 91 | 2 | 9 | 11 | 1 | 1 | 8 | 1 | 5 | 4 | 1 | 13 |
| 6 | 4 | 62 | 6 | 18 | 4091 | 110 | 37 | 73 | 0 | 10 | 10 | 1 | 1 | 8 | 0 | 4 | 3 | 0 | 10 |
| 7 | 2 | 62 | 7 | 16 | 4692 | 114 | 47 | 67 | 0 | 16 | 12 | 1 | 1 | 10 | 0 | 5 | 4 | 1 | 9 |
| 7 | 30 | 62 | 8 | 13 | 4502 | 117 | 36 | 81 | 0 | 12 | 8 | 1 | 1 | 6 | 0 | 4 | 2 | 1 | 9 |
| 8 | 27 | 62 | 9 | 10 | 4009 | 160 | 28 | 132 | 0 | 9 | 12 | 1 | 1 | 10 | 0 | 3 | 1 | 1 | 2 |
| 9 | 24 | 62 | 10 | 8 | 4493 | 118 | 42 | 76 | 1 | 14 | 10 | 1 | 1 | 8 | 0 | 5 | 3 | 1 | 8 |

MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER

STATION LOCATION MISSOURI RIVER AT
OMAHA, NEBRASKA 31

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 12.0 | 9.6 | 8.3 | .6 | 24 | 2.4 | 7.0 | .0 | 12 | 162 | 240 | 4 | 190 | 199 | – | 500 | 19000 |
| 10 | 9 | 61 | 14.9 | 8.4 | 8.3 | 2.0 | 17 | 2.7 | 6.8 | .0 | 12 | 164 | 244 | 2 | 160 | 199 | – | 492 | 22000 |
| 10 | 16 | 61 | 14.3 | 8.5 | 8.2 | 2.0 | 21 | 3.1 | 8.9 | .0 | 13 | 185 | 264 | 6 | 170 | 183 | – | 496 | 51000 |
| 10 | 23 | 61 | 11.5 | 10.2 | 8.3 | 2.2 | 20 | 3.0 | 7.1 | .0 | 13 | 200 | 280 | 5 | 100 | 192 | – | 465 | 36000 |
| 10 | 30 | 61 | 11.1 | 8.9 | 8.2 | 2.4 | 17 | 2.6 | 6.8 | .0 | 13 | 198 | 276 | 2 | 100 | 189 | – | 553 | 37000 |
| 11 | 6 | 61 | 2.7 | 11.2 | 8.3 | 2.9 | 21 | 2.7 | 6.8 | .0 | 14 | 198 | 283 | 6 | 100 | 220 | – | 563 | 11000 |
| 11 | 13 | 61 | 6.6 | 10.1 | 8.3 | 2.2 | 16 | 2.9 | 7.2 | .2 | 14 | 200 | 282 | 10 | 85 | 199 | – | 513 | 24000 |
| 11 | 20 | 61 | 2.2 | 11.2 | 8.1 | 2.1 | 44 | 2.9 | 7.4 | .1 | 13 | 202 | 282 | 6 | 100 | 184 | – | 509 | 17000 |
| 11 | 27 | 61 | 3.4 | 11.3 | 8.2 | 2.8 | 22 | 2.9 | 6.9 | .1 | 14 | 204 | 281 | 8 | 80 | 179 | – | 515 | 16000 |
| 12 | 4 | 61 | 4.4 | 10.8 | 8.2 | 2.3 | 42 | 2.8 | 7.0 | .1 | 14 | 199 | 280 | 7 | 60 | 208 | – | 555 | 22000 |
| 12 | 11 | 61 | .4 | 12.8 | 8.2 | 1.5 | 18 | 2.8 | 6.7 | .1 | 14 | 199 | 280 | 6 | 80 | 189 | – | 503 | 3100 |
| 12 | 18 | 61 | .1 | 12.6 | 8.1 | 1.5 | 20 | 2.7 | 6.4 | .1 | 13 | 184 | 264 | 4 | 15 | 187 | – | 516 | 1400 |
| 12 | 25 | 61 | .1 | 12.1 | 8.1 | .3 | 38 | 2.6 | 6.9 | .1 | 12 | 180 | 254 | 5 | 10 | 184 | – | 492 | 2600 |
| 1 | 2 | 62 | .1 | 10.8 | 8.0 | .5 | 20 | 2.8 | 6.6 | .2 | 14 | 190 | 270 | 5 | 10 | 184 | – | 522 | 500 |
| 1 | 8 | 62 | .1 | 10.9 | 10.9 | 1.2 | 16 | 2.8 | 5.1 | .2 | 14 | 190 | 272 | 5 | 10 | 199 | – | 523 | 850 |
| 1 | 15 | 62 | .1 | 10.9 | 8.1 | .7 | 12 | 2.9 | 5.0 | .1 | 13 | 190 | 278 | 5 | 15 | 220 | – | 552 | 2200 |
| 1 | 22 | 62 | .1 | 11.1 | 8.0 | 1.6 | 15 | 2.8 | 4.8 | .1 | 13 | 197 | 286 | 5 | 15 | 222 | – | 542 | – |
| 1 | 29 | 62 | .1 | 10.8 | 8.0 | 1.7 | 13 | 3.0 | 4.8 | .2 | 14 | 186 | 264 | 5 | 15 | 187 | – | 490 | 4700 |
| 2 | 5 | 62 | .1 | 11.0 | 8.0 | 1.8 | 18 | 2.9 | 6.8 | .2 | 13 | 187 | 278 | 5 | 15 | 192 | – | 513 | 1900 |
| 2 | 12 | 62 | 1.3 | 11.4 | 8.1 | 2.6 | 19 | 3.2 | 7.1 | .2 | 14 | 182 | 260 | 9 | 50 | 187 | – | 506 | 5500 |
| 2 | 19 | 62 | .4 | 9.4 | 7.9 | 6.6 | 32 | 4.7 | 11.2 | .5 | 14 | 162 | 242 | 24 | 220 | 179 | – | 433 | 17000 |
| 2 | 26 | 62 | .3 | 10.6 | 7.9 | 2.2 | 27 | 4.8 | 8.1 | .5 | 13 | 176 | 252 | 13 | 20 | 168 | – | 473 | 2300 |
| 3 | 5 | 62 | .4 | 10.3 | 7.9 | 1.6 | 18 | 3.0 | 6.7 | .2 | 13 | 185 | 256 | 7 | 10 | 173 | – | 481 | 4500 |
| 3 | 12 | 62 | .1 | 11.1 | 8.0 | 1.3 | 16 | 3.1 | 6.3 | .2 | 13 | 171 | 238 | 5 | 15 | 153 | – | 440 | 7000 |
| 3 | 19 | 62 | .3 | 10.6 | 8.0 | 1.1 | 17 | 3.0 | 6.9 | .2 | 13 | 176 | 246 | 5 | 20 | 161 | – | 467 | 3600 |
| 3 | 26 | 62 | 1.2 | 7.2 | 7.8 | 6.4 | 198 | 7.6 | 15.0 | .7 | 8 | 115 | 150 | 25 | 3200 | 80 | – | 264 | 22000 |
| 4 | 2 | 62 | 1.7 | 8.2 | 7.9 | 6.9 | 120 | 8.4 | 17.0 | 1.6 | 11 | 90 | 114 | 25 | 1625 | 46 | – | 174 | – |
| 4 | 9 | 62 | 5.1 | 9.2 | 7.9 | 4.7 | 58 | 10.9 | 16.9 | 1.5 | 7 | 106 | 144 | 30 | 660 | 55 | – | 220 | 3200 |
| 4 | 16 | 62 | 7.0 | 9.5 | 7.9 | 4.5 | 51 | 7.3 | 15.2 | .4 | 9 | 134 | 208 | 20 | 420 | 79 | – | 301 | 9100 |
| 4 | 23 | 62 | 12.9 | 8.4 | 8.0 | 3.7 | 47 | 2.9 | 8.9 | .3 | 9 | 144 | 214 | 18 | 300 | 96 | – | 326 | 5800 |
| 4 | 30 | 62 | 13.3 | 8.6 | 8.0 | 2.1 | 24 | 2.8 | 7.1 | .1 | 9 | 150 | 234 | 16 | 190 | 121 | – | 414 | 5000 |
| 5 | 7 | 62 | 17.2 | 8.5 | 8.3 | 2.0 | 19 | 2.8 | 4.3 | .0 | 12 | 172 | 266 | 12 | 150 | 168 | – | 466 | 3200 |
| 5 | 14 | 62 | 19.0 | 7.4 | 8.2 | 1.6 | 30 | 2.5 | 7.0 | .1 | 14 | 178 | 266 | 8 | 300 | 183 | – | 485 | 9000 |
| 5 | 21 | 62 | 20.4 | 5.3 | 7.9 | 4.3 | 140 | 2.9 | 4.5 | .1 | 12 | 160 | 236 | 12 | 3000 | 155 | – | 437 | 83000 |
| 5 | 28 | 62 | 17.9 | 7.3 | 8.0 | 2.6 | 73 | 2.7 | 7.0 | .0 | 10 | 158 | 242 | 12 | 1050 | 150 | – | 413 | 25000 |
| 6 | 4 | 62 | 16.1 | 7.3 | 8.0 | 3.0 | 76 | 3.1 | 9.0 | .0 | 10 | 177 | 250 | 12 | 1000 | 128 | – | 407 | 23000 |
| 6 | 11 | 62 | 20.8 | 5.8 | 7.7 | 5.3 | 106 | 2.8 | 6.5 | .1 | 9 | 176 | 220 | 15 | 4600 | 127 | – | 353 | – |
| 6 | 18 | 62 | 22.8 | 5.2 | 7.9 | – | 178 | 2.2 | 6.5 | .0 | 15 | 214 | 260 | 17 | 2700 | 136 | – | 450 | 100000 |
| 6 | 25 | 62 | 24.0 | 5.8 | 8.0 | 1.7 | 39 | 4.6 | 10.9 | .0 | 10 | 168 | 258 | 14 | 360 | 142 | – | 431 | 4000 |

NATIONAL WATER QUALITY NETWORK

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEBRASKA

MAJOR BASIN MISSOURI RIVER

MINOR BASIN LOWER MISSOURI BELOW NIOBRARA RIVER

STATION LOCATION MISSOURI RIVER AT

OMAHA, NEBRASKA 31

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 2 | 62 | 24.8 | 6.0 | 8.0 | 2.2 | 38 | 4.5 | 11.4 | .0 | 10 | 167 | 260 | 13 | 410 | 162 | - | 420 | 2600 |
| 7 | 9 | 62 | 25.9 | 5.6 | 8.0 | 3.5 | 67 | 4.5 | 9.0 | .0 | 13 | 179 | 248 | 16 | 1050 | 158 | - | 431 | 2700 |
| 7 | 16 | 62 | 23.8 | 6.2 | 7.9 | 3.5 | 160 | 5.1 | 12.1 | .0 | 10 | 168 | 229 | 18 | 700 | 128 | - | 369 | 30000 |
| 7 | 23 | 62 | 25.5 | 5.5 | 8.0 | 2.7 | 75 | 4.9 | 9.0 | .0 | 10 | 173 | 250 | 24 | 1200 | 146 | - | 415 | 20000 |
| 7 | 30 | 62 | 22.2 | 6.6 | 8.0 | 2.7 | 40 | 3.3 | 9.3 | .0 | 12 | 177 | 270 | 14 | 460 | 165 | - | 426 | 18000 |
| 8 | 6 | 62 | 25.5 | 6.2 | 8.1 | 2.3 | 31 | 3.3 | 9.3 | .0 | 13 | 192 | 286 | 16 | 240 | 179 | - | 462 | 26000 |
| 8 | 13 | 62 | 24.3 | 6.6 | 8.0 | 1.4 | 37 | 3.4 | 8.9 | .0 | 14 | 174 | 278 | 11 | 340 | 193 | - | 486 | 11000 |
| 8 | 20 | 62 | 23.9 | 6.6 | 8.2 | 2.6 | 28 | 3.0 | 7.2 | .0 | 12 | 165 | 264 | 12 | 210 | 192 | - | 471 | 3000 |
| 8 | 27 | 62 | 22.8 | 7.3 | 8.2 | 1.4 | 33 | 2.7 | 8.6 | .0 | 11 | 160 | 268 | 11 | 150 | 213 | .1 | 506 | 3100 |
| 9 | 3 | 62 | 22.8 | 6.5 | 8.0 | 2.6 | 100 | 3.0 | 9.0 | .1 | 11 | 153 | 240 | 14 | 1000 | 171 | - | 429 | 13000 |
| 9 | 10 | 62 | 17.7 | 7.6 | 8.2 | 1.6 | 24 | 2.7 | 6.8 | .1 | 11 | 172 | 270 | 11 | 220 | 200 | .1 | 449 | 67000 |
| 9 | 17 | 62 | 20.6 | 7.1 | 8.2 | 1.3 | 25 | 2.5 | 7.2 | .0 | 12 | 172 | 270 | 8 | 210 | 200 | - | 506 | 34000 |
| 9 | 24 | 62 | 17.5 | 8.2 | 8.3 | 2.1 | 20 | 2.8 | - | .0 | 14 | 163 | 257 | 11 | 160 | 206 | - | 519 | 150000 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Omaha, Nebraska
Operated by U.S. Geological Survey

STATE Nebraska

MAJOR BASIN Missouri River

MINOR BASIN Lower Missouri below Niobrara River

STATION LOCATION Missouri River at
Omaha, Nebraska

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30.200 | 8.640 | 8.160 | 8.400 | 10.300 | 9.000 | 78.500 | 24.600 | 26.800 | 40.400 | 28.700 | 46.400 |
| 2 | 29.700 | 8.400 | 8.040 | 8.400 | 10.000 | 8.800 | 84.500 | 24.600 | 28.200 | 40.400 | 26.600 | 33.200 |
| 3 | 28.700 | 8.520 | 8.040 | 8.600 | 9.200 | 8.800 | 87.500 | 25.000 | 30.700 | 38.800 | 26.600 | 32.100 |
| 4 | 28.200 | 8.880 | 8.040 | 9.000 | 9.200 | 8.600 | 83.000 | 25.700 | 31.800 | 37.600 | 26.800 | 35.200 |
| 5 | 28.000 | 8.760 | 7.920 | 9.000 | 9.600 | 8.400 | 77.000 | 26.800 | 30.000 | 39.800 | 25.400 | 35.800 |
| 6 | 27.700 | 8.640 | 7.920 | 9.000 | 11.000 | 8.200 | 70.200 | 26.800 | 30.200 | 44.000 | 25.400 | 33.700 |
| 7 | 28.000 | 8.280 | 7.920 | 8.800 | 11.500 | 8.400 | 65.800 | 26.400 | 31.800 | 45.400 | 25.400 | 31.000 |
| 8 | 28.200 | 8.400 | 8.520 | 8.400 | 10.500 | 8.600 | 65.300 | 26.800 | 34.300 | 44.700 | 25.000 | 30.200 |
| 9 | 27.200 | 8.400 | 8.880 | 8.000 | 9.900 | 8.800 | 64.800 | 26.800 | 46.100 | 44.000 | 25.000 | 30.700 |
| 10 | 27.000 | 8.400 | 8.200 | 8.500 | 10.400 | 9.600 | 59.900 | 26.600 | 44.700 | 41.400 | 26.600 | 30.700 |
| 11 | 25.400 | 8.400 | 5.700 | 10.000 | 11.000 | 10.600 | 56.200 | 26.600 | 45.400 | 39.400 | 25.900 | 30.400 |
| 12 | 21.300 | 8.280 | 3.400 | 9.000 | 10.800 | 10.700 | 53.000 | 26.600 | 40.400 | 34.300 | 23.600 | 28.400 |
| 13 | 16.900 | 8.280 | 2.600 | 8.800 | 10.400 | 11.000 | 47.500 | 26.400 | 35.800 | 35.200 | 23.200 | 28.000 |
| 14 | 14.800 | 8.280 | 2.440 | 8.800 | 10.400 | 11.200 | 42.700 | 25.900 | 32.600 | 43.400 | 23.900 | 29.200 |
| 15 | 12.400 | 8.280 | 3.160 | 9.600 | 10.700 | 11.200 | 38.800 | 25.900 | 32.600 | 40.800 | 24.100 | 30.000 |
| 16 | 11.000 | 8.640 | 7.030 | 9.600 | 11.400 | 11.000 | 34.900 | 26.400 | 32.400 | 36.700 | 24.600 | 30.200 |
| 17 | 10.200 | 8.520 | 10.900 | 9.600 | 12.500 | 10.600 | 32.600 | 26.800 | 32.100 | 38.800 | 26.800 | 30.700 |
| 18 | 9.780 | 8.280 | 12.300 | 9.600 | 14.000 | 10.600 | 30.400 | 27.700 | 37.300 | 41.100 | 28.000 | 30.000 |
| 19 | 9.520 | 8.040 | 12.300 | 9.400 | 13.800 | 11.200 | 30.400 | 31.500 | 40.800 | 45.800 | 27.700 | 29.400 |
| 20 | 9.390 | 7.920 | 11.500 | 9.200 | 13.000 | 13.500 | 30.400 | 31.500 | 40.100 | 51.800 | 28.200 | 28.700 |
| 21 | 9.260 | 7.920 | 11.500 | 9.000 | 11.000 | 16.200 | 29.400 | 31.800 | 42.700 | 54.200 | 29.000 | 28.000 |
| 22 | 9.130 | 7.920 | 10.000 | 8.600 | 10.000 | 25.000 | 30.400 | 32.900 | 47.500 | 50.000 | 30.200 | 28.000 |
| 23 | 9.000 | 8.160 | 9.800 | 8.500 | 9.800 | 28.000 | 29.700 | 37.300 | 47.500 | 42.000 | 30.700 | 27.700 |
| 24 | 9.000 | 8.400 | 9.700 | 8.800 | 9.500 | 32.000 | 28.000 | 34.000 | 45.800 | 38.800 | 31.000 | 27.700 |
| 25 | 9.130 | 8.400 | 9.600 | 9.400 | 9.400 | 32.900 | 27.500 | 29.400 | 42.700 | 36.100 | 29.200 | 27.700 |
| 26 | 9.000 | 8.280 | 9.200 | 9.700 | 9.400 | 41.400 | 26.800 | 31.200 | 41.100 | 31.500 | 28.000 | 27.500 |
| 27 | 9.130 | 8.280 | 9.100 | 9.800 | 9.200 | 51.800 | 26.800 | 27.000 | 40.400 | 29.400 | 27.700 | 27.000 |
| 28 | 9.000 | 8.040 | 9.000 | 9.900 | 9.200 | 76.100 | 27.000 | 30.200 | 39.800 | 33.700 | 28.700 | 27.200 |
| 29 | 9.390 | 8.040 | 8.900 | 10.000 |  | 104.000 | 26.800 | 41.400 | 40.400 | 34.000 | 30.200 | 27.700 |
| 30 | 9.520 | 8.040 | 8.800 | 10.200 |  | 101.000 | 25.200 | 32.600 | 43.000 | 32.400 | 34.300 | 28.000 |
| 31 | 9.520 |  | 8.600 | 10.400 |  | 88.000 |  | 26.400 |  | 30.000 | 53.400 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** SOUTH DAKOTA

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT
YANKTON, SOUTH DAKOTA

32

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | | | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 14 | - | - | - | - | - | - | 11 | 10 | 30 | 16 | 41 | 19 | | | | | | | | |
| 10 | 9 | 61 | 10 | 27 | - | - | - | - | - | - | 11 | 11 | 48 | 16 | 59 | 19 | | | | | | | | |
| 10 | 16 | 61 | 10 | 30 | - | - | - | - | - | - | 5 | 8 | 12 | 11 | 17 | 14 | | | | | | | | |
| 10 | 23 | 61 | 11 | 3 | 1 | 1 | 3 | 3 | 4 | 3 | 4 | 8 | 28 | 12 | 32 | 14 | | | | | | | | |
| 10 | 30 | 61 | 11 | 7 | - | - | - | - | - | - | 16 | 11 | 33 | 15 | 49 | 19 | | | | | | | | |
| 12 | 18 | 61 | 1 | 11 | - | - | - | - | - | - | 6 | 11 | 22 | 15 | 28 | 19 | | | | | | | | |
| 12 | 26 | 61 | 1 | 9 | 1 | 1 | 4 | 3 | 5 | 3 | 3 | 8 | 16 | 11 | 19 | 14 | | | | | | | | |
| 1 | 2 | 62 | 1 | 12 | - | - | - | - | - | - | 1 | 12 | 30 | 16 | 31 | 20 | | | | | | | | |
| 1 | 8 | 62 | 1 | 18 | - | - | - | - | - | - | 26 | 11 | 30 | 15 | 56 | 19 | | | | | | | | |
| 1 | 15 | 62 | 1 | 29 | - | - | - | - | - | - | 9 | 11 | 24 | 10 | 33 | 15 | | | | | | | | |
| 1 | 22 | 62 | 2 | 6 | 1 | 1 | 4 | 3 | 5 | 3 | 6 | 9 | 19 | 11 | 25 | 14 | | | | | | | | |
| 1 | 29 | 62 | 2 | 12 | - | - | - | - | - | - | 6 | 11 | 31 | 15 | 37 | 19 | | | | | | | | |
| 2 | 5 | 62 | 2 | 15 | - | - | - | - | - | - | 5 | 8 | 24 | 11 | 29 | 14 | | | | | | | | |
| 2 | 12 | 62 | 2 | 27 | - | - | - | - | - | - | 16 | 12 | 41 | 16 | 57 | 20 | | | | | | | | |
| 2 | 19 | 62 | 3 | 5 | - | - | - | - | - | - | 6 | 11 | 13 | 14 | 19 | 18 | | | | | | | | |
| 2 | 26 | 62 | 3 | 14 | 4 | 5 | 3 | 3 | 7 | 6 | 60 | 14 | 23 | 11 | 83 | 18 | | | | | | | | |
| 3 | 5 | 62 | 3 | 16 | - | - | - | - | - | - | 40 | 14 | 25 | 14 | 65 | 20 | | | | | | | | |
| 3 | 12 | 62 | 3 | 26 | - | - | - | - | - | - | 8 | 12 | 21 | 14 | 29 | 18 | | | | | | | | |
| 3 | 19 | 62 | 4 | 3 | - | - | - | - | - | - | 35 | 12 | 18 | 11 | 53 | 16 | | | | | | | | |
| 3 | 26 | 62 | 4 | 9 | 0 | 1 | 7 | 7 | 7 | 7 | 8 | 8 | 58 | 14 | 66 | 23 | | | | | | | | |
| 4 | 2 | 62 | 6 | 15 | - | - | - | - | - | - | 32 | 7 | 34 | 9 | 66 | 11 | | | | | | | | |
| 4 | 9 | 62 | 4 | 27 | - | - | - | - | - | - | 64 | 7 | 82 | 9 | 146 | 11 | | | | | | | | |
| 4 | 16 | 62 | 5 | 1 | - | - | - | - | - | - | 24 | 6 | 56 | 9 | 80 | 11 | | | | | | | | |
| 4 | 23 | 62 | 5 | 29 | 0 | 0 | 4 | 3 | 4 | 3 | 5 | 6 | 54 | 12 | 59 | 13 | | | | | | | | |
| 4 | 30 | 62 | 6 | 1 | - | - | - | - | - | - | 8 | 13 | 48 | 17 | 56 | 21 | | | | | | | | |
| 5 | 7 | 62 | 6 | 20 | - | - | - | - | - | - | 8 | 13 | 44 | 19 | 52 | 23 | | | | | | | | |
| 5 | 14 | 62 | 6 | 22 | - | - | - | - | - | - | 5 | 6 | 35 | 9 | 40 | 11 | | | | | | | | |
| 5 | 21 | 62 | 6 | 26 | - | - | - | - | - | - | 9 | 11 | 34 | 15 | 43 | 19 | | | | | | | | |
| 5 | 28 | 62 | 8 | 13 | 0 | 1 | 3 | 3 | 3 | 3 | 11 | 11 | 23 | 15 | 34 | 18 | | | | | | | | |
| 6 | 4 | 62 | 7 | 6 | - | - | - | - | - | - | 10 | 9 | 43 | 12 | 53 | 15 | | | | | | | | |
| 6 | 11 | 62 | 7 | 10 | - | - | - | - | - | - | 17 | 11 | 30 | 15 | 47 | 19 | | | | | | | | |
| 6 | 18 | 62 | 7 | 17 | - | - | - | - | - | - | 0 | 10 | 34 | 14 | 34 | 17 | | | | | | | | |
| 6 | 25 | 62 | 7 | 24 | 0 | 1 | 0 | 2 | 0 | 2 | 12 | 11 | 51 | 15 | 63 | 19 | | | | | | | | |
| 7 | 2 | 62 | 7 | 31 | - | - | - | - | - | - | 7 | 13 | 22 | 18 | 29 | 22 | | | | | | | | |
| 7 | 9 | 62 | 8 | 17 | - | - | - | - | - | - | 2 | 11 | 32 | 15 | 34 | 19 | | | | | | | | |
| 8 | 6 | 62 | 8 | 28 | - | - | - | - | - | - | 14 | 11 | 52 | 15 | 66 | 19 | | | | | | | | |
| 8 | 13 | 62 | 8 | 31 | - | - | - | - | - | - | 1 | 11 | 35 | 15 | 36 | 19 | | | | | | | | |
| 8 | 20 | 62 | 9 | 5 | 0 | 1 | 4 | 4 | 4 | 4 | 117 | 18 | 54 | 17 | 171 | 25 | | | | | | | | |
| 8 | 27 | 62 | 9 | 11 | 0 | 1 | 2 | 3 | 2 | 3 | 6 | 10 | 38 | 14 | 44 | 17 | | | | | | | | |

**STATION LOCATION** MISSOURI RIVER AT

YANKTON, SOUTH DAKOTA 32

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 9 | 4 | 62 | 10 | 1 | - | - | - | - | - | - | 11 | 12 | 50 | 20 | 61 | 23 | | | | | | |
| 9 | 10 | 62 | 10 | 8 | - | - | - | - | - | - | 13 | 12 | 12 | 18 | 25 | 22 | | | | | | |
| 9 | 17 | 62 | 10 | 25 | - | - | - | - | - | - | 4 | 12 | 45 | 19 | 49 | 22 | | | | | | |
| 9 | 28 | 62 | 10 | 22 | 0 | 1 | 2 | 3 | 2 | 3 | 0 | 16 | 38 | 8 | 38 | 18 | | | | | | |

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 3600 | 20 | 20 | 270 | 0 | 1520 | 20 | 890 | 800 | 1010 | 300 | 55 | 4 | 71 | 3 | 88 | 2 | 38 | 1 | | | | | | | | | | | | |
| 10 | 23 | 61 | 200 | 0 | 0 | 0 | 0 | 40 | 0 | 100 | 40 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 8400 | 0 | 0 | 180 | 0 | 6530 | 0 | 1140 | 600 | 3160 | 760 | 57 | 5 | 55 | 5 | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 1100 | 20 | 20 | 80 | 0 | 430 | 0 | 370 | 150 | 410 | 80 | 71 | 2 | 55 | 1 | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 1600 | 0 | 20 | 0 | 0 | 1180 | 70 | 180 | 160 | 1070 | 180 | 57 | 4 | 55 | 2 | 71 | 1 | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 3500 | 0 | 0 | 70 | 0 | 1510 | 160 | 1640 | 160 | 680 | 0 | 71 | 4 | 57 | 4 | 51 | 1 | 60 | 1 | | | | | | | | | | | | |
| 1 | 2 | 62 | 800 | 0 | 0 | 20 | 0 | 150 | 20 | 440 | 170 | 250 | 20 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 2700 | 50 | 0 | 230 | 0 | 520 | 20 | 1600 | 320 | 520 | 70 | 71 | 4 | 57 | 1 | 51 | 1 | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 2700 | 0 | 0 | 70 | 0 | 40 | 0 | 1740 | 870 | 130 | 130 | 71 | 4 | 82 | 1 | 81 | 1 | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 12100 | 0 | 0 | 80 | 0 | 250 | 0 | 10910 | 830 | 150 | 0 | 71 | 7 | 82 | 1 | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 1100 | 0 | 0 | 0 | 0 | 90 | 0 | 220 | 760 | 130 | 200 | 82 | 2 | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 1000 | 0 | 0 | 20 | 0 | 160 | 20 | 290 | 500 | 270 | 70 | 71 | 1 | 82 | 1 | 57 | 1 | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 1800 | 0 | 0 | 20 | 0 | 540 | 80 | 150 | 990 | 0 | 20 | 82 | 2 | 51 | 2 | 57 | 1 | 88 | 1 | | | | | | | | | | | | |
| 4 | 16 | 62 | 400 | 0 | 20 | 20 | 0 | 70 | 0 | 0 | 250 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 7000 | 0 | 110 | 280 | 0 | 170 | 320 | 3040 | 3100 | 1440 | 210 | 71 | 5 | 82 | 3 | 81 | 2 | 77 | 2 | 88 | 2 | 62 | 2 | 85 | 2 | 87 | 1 | 92 | 1 | | |
| 5 | 21 | 62 | 7700 | 0 | 0 | 590 | 40 | 190 | 20 | 3880 | 3000 | 2280 | 1220 | 71 | 5 | 77 | 3 | 88 | 2 | 82 | 2 | 44 | 2 | 87 | 1 | 81 | 1 | | | | | | |
| 6 | 4 | 62 | 14200 | 0 | 20 | 150 | 20 | 520 | 60 | 4120 | 9300 | 1370 | 500 | 77 | 6 | 71 | 5 | 88 | 2 | 57 | 2 | 87 | 1 | 92 | 1 | | | | | | | | |
| 6 | 18 | 62 | 43000 | 0 | 0 | 720 | 0 | 5360 | 300 | 22870 | 13800 | 9160 | 1560 | 71 | 7 | 51 | 6 | 77 | 6 | 92 | 5 | 87 | 5 | 68 | 3 | 74 | 3 | 80 | 3 | 69 | 2 | 82 | 2 |
| 7 | 2 | 62 | 8800 | 1280 | 0 | 80 | 0 | 20 | 40 | 2730 | 4680 | 460 | 330 | 71 | 4 | 88 | 4 | 4 | 4 | 86 | 2 | 87 | 2 | 80 | 2 | 69 | 1 | 81 | 1 | 92 | 1 | | |
| 7 | 16 | 62 | 800 | 0 | 0 | 270 | 0 | 80 | 0 | 250 | 210 | 40 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 2300 | 60 | 0 | 20 | 0 | 290 | 60 | 1490 | 330 | 580 | 0 | 71 | 3 | 68 | 2 | 57 | 1 | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 2300 | 20 | 0 | 190 | 0 | 870 | 0 | 930 | 290 | 120 | 0 | 57 | 2 | 71 | 2 | 51 | 1 | 69 | 1 | | | | | | | | | | | | |
| 9 | 4 | 62 | 9700 | 0 | 120 | 290 | 0 | 1740 | 210 | 4470 | 2860 | 4220 | 1570 | 71 | 5 | 69 | 4 | 51 | 3 | 87 | 3 | 88 | 2 | 57 | 2 | 38 | 1 | 82 | 1 | 52 | 1 | 92 | 1 |
| 9 | 17 | 62 | 1600 | 0 | 0 | 170 | 0 | 130 | 0 | 1130 | 170 | 1780 | 700 | 71 | 3 | | | | | | | | | | | | | | | | | | |

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT

YANKTON, SOUTH DAKOTA 032

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 83 | 42 | 80 | 31 | 68 | 5 | 71 | 4 | 18 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 23 | 61 | 80 | 60 | 84 | 13 | 71 | 3 | 26 | 3 | 21 | 0 | 0 | 24 | 17 | 2 | 21 | 1 | | | | | | | 2 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 80 | 42 | 82 | 11 | 26 | 9 | 84 | 7 | 31 | 0 | 0 | 22 | 2 | 1 | 17 | 1 | | | | | | | 5 | 50 | 1 | | | | | 0 | 0 |
| 12 | 4 | 61 | 80 | 43 | 84 | 12 | 83 | 5 | 36 | 5 | 35 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 82 | 21 | 80 | 20 | 84 | 18 | 36 | 4 | 37 | 200 | 0 | 317 | 22 | 6 | 21 | 4 | 17 | 3 | 2 | 3 | 15 | 2 | 22 | 77 | 3 | 50 | 1 | | | 5 | 0 |
| 1 | 2 | 62 | 80 | 36 | 84 | 8 | 26 | 4 | 83 | 4 | 48 | 0 | 10 | 73 | 21 | 3 | 46 | 2 | 15 | 2 | 17 | 1 | | | 15 | 77 | 2 | 50 | 1 | 76 | 1 | 0 | 0 |
| 1 | 15 | 62 | 80 | 15 | 71 | 9 | 62 | 8 | 45 | 8 | 60 | 20 | 10 | 47 | 15 | 3 | 21 | 2 | | | | | | | 9 | 50 | 1 | | | | | 1 | 2 |
| 2 | 5 | 62 | 45 | 26 | 33 | 16 | 37 | 14 | 46 | 9 | 35 | 0 | 10 | 10 | 15 | 1 | | | | | | | | | 8 | 50 | 1 | | | | | 0 | 0 |
| 2 | 19 | 62 | 36 | 16 | 80 | 14 | 35 | 13 | 82 | 11 | 46 | 40 | 50 | 16 | 21 | 1 | | | | | | | | | 13 | 50 | 3 | | | | | 0 | 0 |
| 3 | 5 | 62 | 36 | 31 | 35 | 13 | 45 | 9 | 71 | 6 | 41 | 90 | 20 | 0 | | | | | | | | | | | 5 | 77 | 1 | | | | | 0 | 0 |
| 3 | 19 | 62 | 36 | 26 | 71 | 18 | 35 | 15 | 51 | 8 | 33 | 50 | 0 | 2 | | | | | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 4 | 2 | 62 | 36 | 32 | 71 | 9 | 35 | 8 | 65 | 4 | 47 | 40 | 0 | 7 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 36 | 33 | 45 | 13 | 35 | 9 | 71 | 8 | 37 | 0 | 0 | 2 | | | | | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 5 | 7 | 62 | 80 | 43 | 82 | 11 | 9 | 8 | 33 | 7 | 31 | 0 | 20 | 109 | 17 | 4 | 2 | 3 | 21 | 2 | 11 | 2 | 46 | 1 | 78 | 50 | 4 | 76 | 3 | 77 | 2 | 2 | 0 |
| 5 | 21 | 62 | 9 | 39 | 80 | 35 | 83 | 4 | 36 | 4 | 18 | 300 | 0 | 6 | 17 | 1 | | | | | | | | | 13 | 76 | 2 | | | | | – | – |
| 6 | 4 | 62 | 9 | 42 | 80 | 27 | 71 | 7 | 92 | 5 | 19 | 60 | 0 | 0 | | | | | | | | | | | 9 | 76 | 1 | 77 | 1 | | | 0 | 0 |
| 6 | 18 | 62 | 9 | 40 | 30 | 20 | 80 | 19 | 58 | 6 | 15 | 40 | 0 | 2880 | 11 | 9 | 22 | 7 | 17 | 7 | 2 | 3 | 21 | 2 | 208 | 50 | 5 | 51 | 5 | 76 | 4 | 5 | 0 |
| 7 | 2 | 62 | 80 | 31 | 71 | 18 | 62 | 7 | 21 | 4 | 40 | 120 | 0 | – | | | | | | | | | | | – | | | | | | | – | – |
| 7 | 16 | 62 | 80 | 38 | 47 | 19 | 58 | 17 | 56 | 10 | 16 | 0 | 10 | 62 | 17 | 4 | 22 | 1 | | | | | | | 19 | 50 | 2 | 76 | 1 | | | 0 | 0 |
| 8 | 6 | 62 | 80 | 40 | 26 | 17 | 27 | 13 | 58 | 10 | 20 | 0 | 0 | 101 | 17 | 4 | 2 | 2 | 22 | 2 | 11 | 1 | | | 35 | 76 | 4 | 50 | 1 | | | 0 | 0 |
| 8 | 20 | 62 | 58 | 34 | 80 | 25 | 82 | 19 | 56 | 10 | 12 | 0 | 0 | 193 | 17 | 6 | 21 | 2 | 22 | 2 | | | | | 24 | 50 | 3 | 76 | 2 | | | 0 | 0 |
| 9 | 4 | 62 | 58 | 51 | 80 | 19 | 82 | 3 | 92 | 2 | 25 | 0 | 0 | – | | | | | | | | | | | – | | | | | | | – | – |
| 9 | 17 | 62 | 80 | 37 | 58 | 27 | 82 | 5 | 26 | 4 | 27 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

NATIONAL WATER QUALITY NETWORK

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** SOUTH DAKOTA
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER
**STATION LOCATION** MISSOURI RIVER AT
YANKTON, SOUTH DAKOTA 32

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 23 | 61 | 11 | 4 | 4080 | 162 | 31 | 131 | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 20 | 61 | 12 | 4 | 3930 | 156 | 32 | 124 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 18 | 61 | 12 | 31 | 4580 | 123 | 23 | 100 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 18 | 61 | | * | 12590 | 136 | 26 | 110 | 2 | 8 | 7 | 1 | 1 | 5 | 0 | 3 | 1 | 0 | 5 |
| 1 | 29 | 62 | 2 | 12 | 5000 | 113 | 18 | 95 | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 26 | 62 | 3 | 12 | 3340 | 141 | 32 | 109 | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 26 | 62 | | * | 8340 | 125 | 24 | 101 | 2 | 7 | 7 | 1 | 0 | 6 | 0 | 2 | 1 | 1 | 4 |
| 3 | 26 | 62 | 4 | 7 | 4980 | 113 | 32 | 81 | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 23 | 62 | 5 | 5 | 3250 | 174 | 71 | 103 | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 21 | 62 | 5 | 29 | 1000 | 266 | 102 | 164 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 18 | 62 | 7 | 2 | 1670 | 240 | 104 | 136 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 18 | 62 | | * | 10900 | 164 | 61 | 103 | 2 | 19 | 18 | 2 | 1 | 14 | 1 | 8 | 5 | 1 | 8 |
| 7 | 23 | 62 | 8 | 6 | 5000 | 95 | 29 | 66 | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 20 | 62 | 8 | 30 | 4230 | 125 | 48 | 77 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 24 | 62 | 10 | 4 | 3800 | 75 | 21 | 54 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 24 | 62 | | * | 13030 | 99 | 33 | 66 | 1 | 10 | 9 | 1 | 1 | 7 | 0 | 3 | 3 | 1 | 6 |

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT
YANKTON, SOUTH DAKOTA 32

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 3.5 | 13.2 | 8.2 | 1.2 | - | .8 | 2.0 | .1 | 20 | 162 | 234 | 30 | 20 | - | .1 | - | - |
| 10 | 9 | 61 | 13.2 | 9.0 | 8.3 | 1.2 | 20 | .7 | 1.9 | .1 | 20 | 160 | 252 | 30 | 20 | - | .1 | - | 18 |
| 10 | 16 | 61 | 14.6 | 9.1 | 8.3 | 1.1 | - | 1.4 | 2.6 | .1 | 19 | 170 | 244 | 20 | 30 | - | .1 | - | 32 |
| 10 | 20 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 120 |
| 10 | 23 | 61 | 12.2 | 9.7 | 8.3 | 1.1 | - | .7 | 2.2 | .1 | 21 | 170 | 254 | 30 | 30 | - | .1 | - | 60 |
| 10 | 30 | 61 | 10.8 | 10.4 | 8.3 | 1.3 | - | .8 | 2.0 | .1 | 22 | 170 | 256 | 20 | 20 | - | .1 | - | 8 |
| 11 | 6 | 61 | 5.1 | 12.0 | 8.4 | 1.2 | 32 | .8 | 3.8 | .1 | 18 | 168 | 238 | 20 | 40 | - | .1 | - | 130 |
| 11 | 13 | 61 | 5.2 | 12.8 | 8.2 | .6 | - | .9 | 2.9 | .2 | 21 | 164 | 232 | 20 | 20 | - | .1 | - | - |
| 11 | 20 | 61 | 9.1 | 9.6 | 8.3 | .7 | - | 1.1 | 2.8 | .1 | 18 | 164 | 222 | 20 | 20 | - | .1 | - | - |
| 11 | 27 | 61 | 3.4 | 14.4 | 8.3 | .8 | - | .8 | 2.9 | .1 | 20 | 164 | 230 | 10 | 20 | - | .1 | - | 220 |
| 12 | 4 | 61 | 2.8 | 15.0 | 8.3 | 3.6 | 22 | .6 | 2.0 | .1 | 22 | 160 | 230 | 20 | 15 | - | .1 | - | 33 |
| 12 | 11 | 61 | 5.4 | 15.1 | 8.2 | 3.4 | - | 1.1 | 3.0 | .1 | 16 | 174 | 228 | 40 | 20 | - | .1 | - | - |
| 12 | 18 | 61 | 4.4 | 16.5 | 8.2 | 4.1 | - | .9 | 2.9 | .2 | 17 | 170 | 234 | 20 | 20 | - | .1 | - | 7 |
| 12 | 26 | 61 | 3.8 | 16.6 | 8.2 | 4.2 | - | .5 | 3.0 | .2 | 20 | 176 | 256 | 20 | 20 | - | .1 | - | - |
| 1 | 2 | 62 | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 8 | 62 | 2.9 | 12.5 | 8.2 | 2.6 | - | 1.3 | 2.5 | .2 | 20 | 180 | 260 | 30 | 20 | 205 | .1 | 478 | - |
| 1 | 15 | 62 | 2.8 | 12.1 | 8.1 | .7 | - | 1.5 | 3.9 | .2 | 20 | 190 | 232 | 20 | 20 | 205 | .1 | 488 | - |
| 1 | 22 | 62 | 1.9 | 13.7 | 8.1 | 2.7 | - | 1.6 | 2.9 | .2 | 20 | 170 | 264 | 20 | 20 | 200 | .1 | 482 | *4 |
| 1 | 29 | 62 | 3.2 | 13.2 | 8.1 | 2.9 | - | 1.3 | 3.9 | .2 | 20 | 182 | 246 | 40 | 30 | 215 | .1 | 488 | - |
| 2 | 5 | 62 | 2.5 | 14.2 | 8.1 | .5 | - | 1.4 | 3.6 | .2 | 22 | 186 | 260 | 30 | 20 | 200 | .1 | 496 | *4 |
| 2 | 12 | 62 | 2.9 | 15.7 | 8.2 | 3.2 | 12 | .7 | 2.8 | .2 | 19 | 172 | 250 | 30 | 40 | 200 | .1 | 488 | 200 |
| 2 | 19 | 62 | 2.8 | 16.4 | 8.2 | 4.6 | - | .8 | 3.1 | .1 | 19 | 164 | 238 | 30 | 30 | 185 | .1 | 441 | - |
| 2 | 26 | 62 | 2.9 | 16.6 | 8.2 | 3.8 | - | .3 | 1.4 | .2 | 19 | 172 | 226 | 20 | 140 | 200 | .1 | 511 | 11 |
| 3 | 5 | 62 | 3.4 | 18.0 | 8.2 | 3.2 | - | .6 | 2.1 | .2 | 19 | 156 | 196 | 30 | 100 | 150 | .1 | - | 83 |
| 3 | 12 | 62 | 3.0 | 17.8 | 8.0 | 2.2 | 12 | .4 | 2.6 | .2 | 24 | 158 | 226 | 10 | 60 | - | .3 | - | - |
| 3 | 19 | 62 | 2.9 | 18.4 | 8.0 | 1.0 | - | 1.0 | 2.8 | .2 | 18 | 180 | 236 | 10 | 200 | 190 | .2 | 450 | - |
| 3 | 26 | 62 | 1.9 | 19.2 | 8.0 | 2.2 | - | 2.7 | 3.9 | .2 | 22 | 172 | 232 | 30 | 20 | 160 | .1 | 438 | 33 |
| 4 | 2 | 62 | 1.0 | 18.4 | 8.0 | 2.7 | - | 3.1 | 4.7 | .2 | 21 | 148 | 200 | 60 | 40 | 175 | .2 | 425 | - |
| 4 | 9 | 62 | 2.5 | 12.0 | 8.1 | 4.4 | - | 1.1 | 6.1 | .4 | 16 | 116 | 158 | 50 | 100 | 110 | .1 | 303 | - |
| 4 | 16 | 62 | 2.2 | 12.9 | 8.1 | 2.2 | - | 2.6 | 5.4 | .4 | 20 | 108 | 170 | 50 | 70 | - | .1 | 270 | - |
| 4 | 23 | 62 | 9.0 | 10.7 | 7.9 | 2.3 | - | 2.4 | 7.0 | .4 | 11 | 116 | 162 | 30 | 60 | 110 | .2 | 360 | - |
| 4 | 30 | 62 | 12.8 | 9.5 | 8.0 | 2.0 | - | 1.2 | 2.7 | .2 | 17 | 140 | 226 | 20 | 15 | - | .2 | 359 | *40 |
| 5 | 7 | 62 | 14.4 | 10.1 | 8.3 | 3.8 | 11 | 1.0 | 4.1 | .2 | 22 | 170 | 258 | 10 | 25 | 205 | .2 | 493 | *4 |
| 5 | 14 | 62 | 17.2 | 9.0 | 8.2 | 1.5 | - | .9 | 2.4 | .2 | 21 | 172 | 258 | 20 | 20 | 200 | .1 | 492 | 200 |
| 5 | 21 | 62 | 18.9 | 8.7 | 8.4 | 1.2 | - | .3 | 2.1 | .1 | 24 | 172 | 252 | 5 | 25 | 205 | .1 | 492 | 80 |
| 5 | 28 | 62 | 17.9 | 8.6 | 8.3 | .8 | - | 1.8 | 3.9 | .2 | 22 | 162 | 246 | 5 | 20 | 190 | .1 | 473 | *40 |
| 6 | 4 | 62 | 17.0 | 9.3 | 8.2 | .5 | - | .5 | 3.2 | .2 | 22 | 162 | 246 | 10 | 30 | 185 | .1 | 452 | 200 |
| 6 | 11 | 62 | 19.8 | 10.4 | 8.4 | 5.3 | - | .9 | 3.8 | .2 | 21 | 160 | 244 | 10 | 30 | 175 | .1 | 414 | 680 |
| 6 | 18 | 62 | 21.8 | 9.8 | 8.3 | 4.6 | - | 1.6 | 3.9 | .1 | 22 | 158 | 238 | 15 | 60 | 160 | .1 | 421 | 800 |

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** MISSOURI RIVER AT

YANKTON, SOUTH DAKOTA 32

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 25 | 62 | 23.0 | 7.3 | 8.1 | 4.2 | - | 2.8 | 5.1 | .2 | 19 | 150 | 234 | 30 | 40 | 150 | .1 | 420 | 200 |
| 7 | 2 | 62 | 24.0 | 7.9 | 8.1 | 1.2 | - | 1.2 | - | .2 | 22 | 158 | 252 | 20 | 30 | 180 | .1 | 445 | 100 |
| 7 | 9 | 62 | 25.2 | 8.3 | 8.2 | .9 | - | 1.8 | 4.5 | .2 | 25 | 656 | 240 | 20 | 25 | 36 | .1 | 431 | *40 |
| 7 | 23 | 62 | 24.6 | 9.8 | 8.1 | 3.2 | - | 1.4 | 4.2 | .2 | 20 | 154 | 234 | 20 | 40 | - | .1 | - | *200 |
| 7 | 30 | 62 | 22.9 | 10.5 | 8.2 | 2.8 | - | 1.8 | 4.4 | .1 | 22 | 152 | 244 | 10 | 15 | - | .1 | - | 100 |
| 8 | 6 | 62 | 24.0 | 11.0 | 8.2 | 1.9 | 9 | 1.4 | 3.8 | .2 | 23 | 154 | 244 | 5 | 10 | 195 | .1 | 480 | - |
| 8 | 13 | 62 | 24.0 | 11.5 | 8.2 | 2.1 | - | 1.3 | 2.9 | .1 | 23 | 154 | 238 | 5 | 15 | 190 | .1 | 482 | - |
| 8 | 20 | 62 | 24.1 | 11.1 | 8.1 | 1.9 | - | 1.5 | 3.0 | .1 | 20 | 148 | 240 | 5 | 15 | 200 | .1 | 500 | - |
| 8 | 27 | 62 | 25.9 | 11.9 | 8.2 | 1.7 | - | 1.7 | 2.8 | .2 | 20 | 154 | 252 | 10 | 20 | 210 | .1 | 494 | 1000 |
| 9 | 4 | 62 | 20.8 | 7.9 | 8.2 | 1.2 | - | 1.3 | 2.7 | .1 | 20 | 154 | 248 | 5 | 20 | 220 | .1 | 498 | 100 |
| 9 | 10 | 62 | 16.8 | 9.2 | 8.2 | 1.4 | - | .9 | 2.0 | .1 | 22 | 148 | 248 | 5 | 20 | 210 | .1 | 530 | 1000 |
| 9 | 17 | 62 | 19.9 | 9.8 | 8.2 | 1.4 | - | .6 | 2.7 | .2 | 19 | 148 | 240 | 10 | 20 | 210 | .1 | - | 500 |
| 9 | 24 | 62 | 18.8 | 9.7 | 8.2 | 2.6 | - | .8 | 4.0 | .2 | 19 | 142 | 240 | 5 | 20 | - | .1 | - | *100 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Yankton, South Dakota
Operated by U.S. Geological Survey

| | |
|---|---|
| STATE | South Dakota |
| MAJOR BASIN | Missouri River |
| MINOR BASIN | Lower Missouri below Niobrara River |
| STATION LOCATION | Missouri River at<br>Yankton, South Dakota |

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 28.900 | 6.510 | 6.190 | 7.000 | 7.350 | 7.840 | 5.000 | 20.100 | 12.700 | 27.800 | 18.700 | 22.300 |
| 2 | 28.800 | 5.950 | 6.270 | 6.800 | 7.660 | 6.390 | 6.300 | 20.100 | 12.600 | 30.700 | 17.000 | 24.700 |
| 3 | 28.700 | 6.030 | 6.230 | 6.430 | 7.310 | 5.270 | 6.510 | 20.700 | 12.700 | 35.000 | 17.700 | 25.500 |
| 4 | 28.800 | 5.950 | 6.910 | 5.990 | 6.710 | 6.310 | 6.710 | 19.800 | 13.200 | 35.100 | 17.900 | 23.600 |
| 5 | 28.400 | 6.030 | 6.830 | 8.500 | 7.620 | 6.000 | 6.950 | 20.500 | 13.800 | 33.300 | 19.300 | 21.600 |
| 6 | 26.700 | 6.110 | 6.830 | 10.700 | 8.920 | 6.500 | 7.310 | 21.300 | 14.400 | 29.300 | 20.100 | 23.600 |
| 7 | 24.800 | 6.110 | 6.870 | 6.700 | 8.610 | 8.300 | 8.740 | 21.600 | 16.300 | 26.800 | 19.300 | 25.800 |
| 8 | 22.100 | 6.150 | 6.790 | 7.550 | 8.480 | 6.950 | 8.700 | 22.000 | 21.000 | 24.400 | 18.800 | 24.600 |
| 9 | 20.200 | 6.030 | 6.590 | 10.900 | 7.230 | 9.020 | 8.790 | 21.600 | 15.900 | 19.300 | 19.800 | 25.000 |
| 10 | 15.700 | 6.030 | 6.800 | 10.100 | 7.270 | 9.500 | 8.480 | 22.300 | 13.000 | 15.200 | 19.200 | 22.500 |
| 11 | 11.900 | 6.030 | 13.100 | 10.000 | 7.350 | 9.280 | 8.700 | 22.800 | 12.200 | 15.300 | 19.500 | 23.700 |
| 12 | 8.790 | 6.030 | 12.400 | 10.500 | 7.550 | 9.240 | 8.560 | 22.300 | 12.600 | 15.600 | 19.800 | 25.200 |
| 13 | 7.550 | 5.950 | 12.600 | 10.000 | 7.350 | 9.500 | 7.660 | 22.800 | 12.000 | 17.700 | 20.800 | 25.800 |
| 14 | 6.550 | 5.950 | 11.600 | 9.500 | 7.190 | 10.700 | 6.870 | 22.700 | 12.000 | 22.700 | 23.500 | 25.900 |
| 15 | 6.470 | 5.790 | 10.500 | 9.800 | 7.660 | 11.300 | 6.950 | 23.200 | 9.600 | 26.300 | 25.000 | 25.000 |
| 16 | 6.430 | 6.030 | 10.200 | 8.960 | 7.840 | 11.400 | 7.530 | 24.000 | 11.000 | 32.300 | 24.100 | 24.200 |
| 17 | 6.230 | 5.950 | 10.000 | 7.800 | 8.340 | 11.300 | 10.800 | 22.600 | 12.800 | 34.900 | 24.400 | 23.400 |
| 18 | 6.190 | 5.990 | 10.000 | 9.000 | 8.020 | 11.400 | 11.100 | 21.400 | 16.200 | 34.900 | 25.700 | 24.300 |
| 19 | 6.710 | 5.950 | 10.000 | 10.100 | 7.760 | 10.800 | 10.600 | 19.800 | 27.200 | 33.000 | 27.600 | 25.100 |
| 20 | 7.350 | 6.270 | 9.600 | 9.700 | 8.160 | 10.600 | 12.800 | 21.600 | 25.000 | 26.100 | 29.500 | 25.300 |
| 21 | 7.400 | 6.150 | 8.560 | 9.300 | 8.200 | 10.200 | 13.000 | 18.900 | 25.200 | 25.800 | 29.700 | 25.500 |
| 22 | 6.950 | 6.030 | 7.800 | 9.180 | 7.980 | 10.600 | 14.300 | 16.500 | 25.100 | 25.500 | 29.800 | 25.700 |
| 23 | 7.030 | 6.110 | 8.000 | 9.000 | 7.480 | 11.800 | 15.200 | 13.800 | 25.000 | 21.100 | 28.500 | 25.600 |
| 24 | 7.030 | 6.110 | 8.000 | 9.500 | 6.710 | 12.800 | 18.300 | 12.800 | 25.000 | 16.100 | 28.300 | 25.500 |
| 25 | 6.910 | 6.150 | 7.400 | 9.100 | 6.710 | 13.800 | 16.900 | 13.000 | 25.000 | 15.600 | 28.100 | 23.900 |
| 26 | 6.950 | 5.950 | 7.300 | 8.650 | 7.190 | 15.200 | 16.700 | 13.000 | 26.000 | 17.200 | 27.800 | 27.000 |
| 27 | 6.950 | 6.270 | 7.300 | 8.800 | 8.380 | 15.500 | 16.600 | 13.600 | 27.200 | 18.500 | 27.400 | 26.700 |
| 28 | 6.390 | 6.230 | 6.200 | 8.970 | 8.920 | 11.400 | 16.300 | 11.400 | 27.200 | 18.800 | 28.600 | 26.500 |
| 29 | 6.110 | 6.190 | 6.200 | 8.160 | | 9.800 | 17.200 | 9.900 | 27.300 | 18.700 | 23.900 | 27.200 |
| 30 | 6.030 | 6.270 | 7.100 | 7.260 | | 6.110 | 19.000 | 11.800 | 27.500 | 17.300 | 21.500 | 26.800 |
| 31 | 5.750 | | 7.000 | 7.760 | | 5.200 | | 13.000 | | 17.200 | 20.000 | |

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** MISSOURI-SOURIS RIVERS

**STATION LOCATION** MISSOURI RIVER AT
BISMARCK, NORTH DAKOTA

33

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 3 | 61 | 10 | 13 | 1 | 1 | 0 | 2 | 1 | 2 | 9 | 8 | 16 | 11 | 25 | 14 | | | | | | |
| 10 | 10 | 61 | 10 | 26 | - | - | - | - | - | - | 4 | 10 | 20 | 14 | 24 | 17 | | | | | | |
| 10 | 17 | 61 | 10 | 25 | - | - | - | - | - | - | 41 | 21 | 16 | 14 | 57 | 26 | | | | | | |
| 10 | 24 | 61 | 11 | 1 | - | - | - | - | - | - | 5 | 13 | 3 | 12 | 8 | 18 | | | | | | |
| 10 | 31 | 61 | 11 | 13 | - | - | - | - | - | - | 2 | 12 | 9 | 14 | 11 | 18 | | | | | | |
| 11 | 7 | 61 | 11 | 21 | 1 | 1 | 1 | 2 | 2 | 2 | 10 | 9 | 15 | 11 | 25 | 14 | | | | | | |
| 11 | 13 | 61 | 11 | 27 | - | - | - | - | - | - | 18 | 12 | 26 | 14 | 44 | 18 | | | | | | |
| 11 | 23 | 61 | 12 | 1 | - | - | - | - | - | - | 25 | 12 | 33 | 13 | 58 | 18 | | | | | | |
| 11 | 28 | 61 | 12 | 12 | - | - | - | - | - | - | 25 | 12 | 22 | 14 | 47 | 18 | | | | | | |
| 12 | 5 | 61 | 12 | 18 | - | - | - | - | - | - | 1 | 11 | 23 | 14 | 24 | 18 | | | | | | |
| 12 | 12 | 61 | 12 | 21 | - | - | - | - | - | - | 0 | 11 | 5 | 14 | 5 | 18 | | | | | | |
| 12 | 19 | 61 | 12 | 29 | - | - | - | - | - | - | 0 | 11 | 12 | 15 | 12 | 19 | | | | | | |
| 1 | 2 | 62 | 1 | 12 | 0 | 1 | 4 | 2 | 4 | 2 | 4 | 8 | 15 | 11 | 19 | 14 | | | | | | |
| 1 | 9 | 62 | 1 | 24 | - | - | - | - | - | - | 8 | 8 | 13 | 11 | 21 | 14 | | | | | | |
| 1 | 16 | 62 | 1 | 25 | - | - | - | - | - | - | 0 | 10 | 8 | 14 | 8 | 17 | | | | | | |
| 1 | 23 | 62 | 2 | 6 | - | - | - | - | - | - | 0 | 10 | 12 | 14 | 12 | 17 | | | | | | |
| 1 | 30 | 62 | 2 | 9 | - | - | - | - | - | - | 0 | 11 | 6 | 15 | 6 | 19 | | | | | | |
| 2 | 6 | 62 | 2 | 19 | 0 | 1 | 4 | 3 | 4 | 3 | 2 | 7 | 20 | 11 | 22 | 13 | | | | | | |
| 2 | 13 | 62 | 2 | 23 | - | - | - | - | - | - | 8 | 10 | 18 | 14 | 26 | 7 | | | | | | |
| 2 | 19 | 62 | 3 | 6 | - | - | - | - | - | - | 6 | 11 | 16 | 14 | 22 | 18 | | | | | | |
| 2 | 27 | 62 | 3 | 13 | - | - | - | - | - | - | 0 | 8 | 11 | 11 | 11 | 14 | | | | | | |
| 3 | 6 | 62 | 3 | 20 | 0 | 1 | 4 | 3 | 4 | 3 | 5 | 11 | 14 | 15 | 19 | 19 | | | | | | |
| 3 | 13 | 62 | 3 | 30 | - | - | - | - | - | - | 7 | 11 | 19 | 11 | 26 | 16 | | | | | | |
| 3 | 21 | 62 | 4 | 3 | - | - | - | - | - | - | 45 | 12 | 13 | 14 | 58 | 18 | | | | | | |
| 3 | 27 | 62 | 4 | 11 | - | - | - | - | - | - | 7 | 11 | 25 | 14 | 32 | 19 | | | | | | |
| 4 | 3 | 62 | 4 | 20 | 1 | 1 | 4 | 3 | 5 | 3 | 12 | 9 | 21 | 11 | 33 | 14 | | | | | | |
| 4 | 10 | 62 | 4 | 24 | - | - | - | - | - | - | 17 | 12 | 23 | 15 | 40 | 19 | | | | | | |
| 4 | 17 | 62 | 4 | 30 | - | - | - | - | - | - | 13 | 14 | 32 | 15 | 45 | 21 | | | | | | |
| 4 | 24 | 62 | 5 | 31 | - | - | - | - | - | - | 0 | 13 | 24 | 18 | 24 | 22 | | | | | | |
| 5 | 1 | 62 | 6 | 4 | - | - | - | - | - | - | 14 | 14 | 22 | 18 | 36 | 22 | | | | | | |
| 5 | 8 | 62 | 6 | 12 | 1 | 1 | 4 | 3 | 5 | 3 | 5 | 11 | 15 | 14 | 20 | 18 | | | | | | |
| 5 | 15 | 62 | 6 | 25 | - | - | - | - | - | - | 11 | 15 | 22 | 19 | 33 | 24 | | | | | | |
| 5 | 22 | 62 | 6 | 27 | - | - | - | - | - | - | 16 | 12 | 27 | 15 | 43 | 19 | | | | | | |
| 6 | 5 | 62 | 7 | 5 | 0 | 1 | 4 | 3 | 4 | 3 | 27 | 13 | 16 | 15 | 43 | 20 | | | | | | |
| 6 | 12 | 62 | 7 | 17 | - | - | - | - | - | - | 14 | 12 | 36 | 15 | 50 | 19 | | | | | | |
| 6 | 19 | 62 | 7 | 12 | - | - | - | - | - | - | 59 | 18 | 25 | 15 | 84 | 23 | | | | | | |
| 6 | 26 | 62 | 7 | 23 | - | - | - | - | - | - | 11 | 13 | 28 | 15 | 39 | 20 | | | | | | |
| 7 | 2 | 62 | 8 | 3 | 1 | 1 | 2 | 2 | 3 | 2 | 11 | 13 | 15 | 17 | 26 | 21 | | | | | | |
| 7 | 17 | 62 | 10 | 4 | - | - | - | - | - | - | 7 | 11 | 14 | 15 | 21 | 19 | | | | | | |
| 7 | 24 | 62 | 8 | 21 | - | - | - | - | - | - | 4 | 11 | 47 | 15 | 51 | 19 | | | | | | |
| 7 | 31 | 62 | 10 | 12 | - | - | - | - | - | - | 3 | 7 | 13 | 6 | 16 | 9 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** NORTH DAKOTA
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** MISSOURI-SOURIS RIVERS
**STATION LOCATION** MISSOURI RIVER AT
BISMARCK, NORTH DAKOTA 33

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 8 | 7 | 62 | 8 | 23 | 0 | 1 | 1 | 2 | 1 | 2 | 5 | 11 | 16 | 14 | 21 | 18 | | | | | | |
| 8 | 14 | 62 | 9 | 5 | - | - | - | - | - | - | 27 | 10 | 17 | 7 | 44 | 12 | | | | | | |
| 8 | 21 | 62 | 9 | 6 | - | - | - | - | - | - | 3 | 10 | 24 | 14 | 27 | 17 | | | | | | |
| 8 | 28 | 62 | 9 | 18 | 1 | 1 | 4 | 3 | 5 | 3 | 15 | 9 | 40 | 13 | 59 | 16 | | | | | | |
| 9 | 4 | 62 | 9 | 20 | 1 | 1 | 4 | 3 | 5 | 3 | 11 | 10 | 22 | 14 | 33 | 17 | | | | | | |
| 9 | 18 | 62 | 10 | 10 | - | - | - | - | - | - | 12 | 11 | 24 | 15 | 36 | 19 | | | | | | |
| 9 | 25 | 62 | 10 | 19 | - | - | - | - | - | - | 7 | 8 | 55 | 11 | 62 | 14 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** NORTH DAKOTA

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** MISSOURI-SOURIS RIVERS

**STATION LOCATION** MISSOURI RIVER AT
BISMARCK, NORTH DAKOTA

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 3 | 61 | 2000 | 20 | 0 | 270 | 0 | 20 | 130 | 1500 | 90 | 1740 | 160 | 71 | 7 | 69 | 2 | | | | | | | | | | | | | | | | |
| 10 | 10 | 61 | 400 | 0 | 0 | 0 | 0 | 70 | 0 | 0 | 380 | 20 | 110 | 77 | 1 | | | | | | | | | | | | | | | | | | |
| 11 | 7 | 61 | 400 | 0 | 20 | 0 | 0 | 20 | 0 | 80 | 270 | 0 | 80 | 77 | 1 | | | | | | | | | | | | | | | | | | |
| 11 | 22 | 61 | 400 | 0 | 0 | 50 | 0 | 0 | 0 | 50 | 270 | 0 | 140 | 77 | 1 | | | | | | | | | | | | | | | | | | |
| 12 | 5 | 61 | 500 | 0 | 0 | 50 | 0 | 0 | 0 | 50 | 450 | 20 | 0 | 77 | 2 | | | | | | | | | | | | | | | | | | |
| 12 | 19 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 50 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 1 | 16 | 62 | 200 | 0 | 0 | 0 | 0 | 110 | 20 | 20 | 0 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 2 | 6 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 300 | 0 | 0 | 0 | 0 | 60 | 0 | 120 | 80 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 3 | 6 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 20 | 20 | 60 | | | | | | | | | | | | | | | | | | | | |
| 3 | 21 | 62 | 200 | 0 | 0 | 20 | 0 | 0 | 0 | 20 | 140 | 0 | 50 | | | | | | | | | | | | | | | | | | | | |
| 4 | 3 | 62 | 300 | 0 | 0 | 20 | 0 | 60 | 0 | 20 | 190 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 4 | 17 | 62 | 500 | 20 | 0 | 110 | 0 | 0 | 0 | 180 | 180 | 50 | 110 | | | | | | | | | | | | | | | | | | | | |
| 5 | 8 | 62 | 100 | 0 | 0 | 0 | 0 | 40 | 0 | 20 | 40 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 130 | 0 | 60 | | | | | | | | | | | | | | | | | | | | |
| 6 | 5 | 62 | 500 | 0 | 0 | 20 | 0 | 0 | 20 | 40 | 460 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 6 | 19 | 62 | 300 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 270 | 20 | 60 | | | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 500 | 0 | 0 | 20 | 0 | 0 | 0 | 300 | 170 | 40 | 0 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 17 | 62 | 300 | 0 | 0 | 40 | 0 | 40 | 0 | 120 | 80 | 40 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 7 | 62 | 800 | 20 | 0 | 0 | 390 | 0 | 0 | 80 | 290 | 0 | 0 | 50 | 2 | | | | | | | | | | | | | | | | | | |
| 8 | 21 | 62 | 4400 | 0 | 0 | 40 | * | 0 | 0 | 460 | 1480 | 80 | 130 | 50 | 4 | 88 | 2 | 87 | 2 | 82 | 2 | 71 | 1 | 68 | 1 | | | | | | | | |
| 9 | 4 | 62 | 1400 | 0 | 0 | 130 | 0 | 20 | 0 | 380 | 890 | 40 | 0 | 88 | 2 | 68 | 1 | 71 | 1 | 87 | 1 | 82 | 1 | | | | | | | | | | |
| 9 | 18 | 62 | 600 | 0 | 0 | 40 | 0 | 0 | 0 | 80 | 460 | 40 | 80 | 87 | 1 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| *8 | 21 | 62 | | | | | 2380 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 3 | 61 | 9 | 84 | 47 | 7 | 58 | 3 | 84 | 2 | 5 | 70 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 10 | 10 | 61 | 9 | 74 | 47 | 17 | 58 | 6 | 36 | 2 | 1 | 0 | 0 | 8 | 17 | 1 | | | | | | | | | 9 | 77 | 1 | | | | | 0 | 0 |
| 11 | 7 | 61 | 9 | 87 | 47 | 3 | 58 | 3 | | 1 | 6 | 0 | 0 | 0 | | | | | | | | | | | 8 | 77 | 2 | | | | | 0 | 0 |
| 11 | 22 | 61 | 9 | 76 | 47 | 7 | 45 | 6 | 84 | 2 | 9 | 0 | 0 | 0 | | | | | | | | | | | 10 | 77 | 2 | | | | | 0 | 0 |
| 12 | 5 | 61 | 9 | 59 | 56 | 10 | 45 | 7 | 47 | 5 | 19 | 20 | 0 | 0 | | | | | | | | | | | 6 | 77 | 1 | | | | | 0 | 0 |
| 12 | 19 | 61 | 9 | 79 | 45 | 6 | 84 | 3 | 70 | 2 | 10 | 0 | 0 | 0 | | | | | | | | | | | 4 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 9 | 84 | 45 | 4 | 97 | 1 | 98 | 1 | 10 | 0 | 0 | 5 | | | | | | | | | | | 18 | 77 | 2 | 50 | 2 | 76 | 1 | 0 | 0 |
| 1 | 16 | 62 | 9 | 48 | 47 | 5 | 65 | 3 | 58 | 2 | 42 | 20 | 0 | 1 | | | | | | | | | | | 10 | 77 | 2 | 50 | 1 | | | 0 | 0 |
| 2 | 6 | 62 | 9 | 44 | 16 | 6 | 45 | 6 | 84 | 5 | 39 | 20 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 0 | 0 | 1 | | | | | | | | | | | 5 | 77 | 1 | | | | | 0 | 0 |
| 3 | 6 | 62 | 9 | 53 | 51 | 4 | 54 | 4 | 92 | 4 | 35 | 0 | 0 | 1 | | | | | | | | | | | 5 | 77 | 1 | | | | | 0 | 0 |
| 3 | 21 | 62 | 9 | 36 | 36 | 12 | 64 | 6 | 47 | 5 | 41 | 0 | 0 | 0 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 4 | 3 | 62 | 9 | 33 | 64 | 11 | 71 | 7 | 65 | 5 | 44 | 0 | 0 | 0 | | | | | | | | | | | 9 | 50 | 1 | 76 | 1 | | | 1 | 0 |
| 4 | 17 | 62 | 9 | 19 | 91 | 3 | 45 | 2 | 58 | 2 | 74 | 20 | 0 | 0 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 5 | 8 | 62 | 9 | 60 | 36 | 11 | 51 | 6 | 92 | 3 | 20 | 80 | 0 | 4 | | | | | | | | | | | 20 | 76 | 3 | 50 | 2 | | | 0 | 0 |
| 5 | 21 | 62 | 9 | 58 | 36 | 9 | 51 | 6 | 65 | 4 | 23 | 0 | 0 | 2 | | | | | | | | | | | 18 | 50 | 3 | 76 | 1 | | | 0 | 0 |
| 6 | 5 | 62 | 80 | 17 | 36 | 13 | 92 | 9 | 9 | 6 | 55 | 0 | 0 | 4 | | | | | | | | | | | 13 | 50 | 2 | 76 | 2 | | | 0 | 0 |
| 6 | 19 | 62 | 92 | 11 | 35 | 6 | 65 | 5 | 75 | 5 | 73 | 0 | 0 | 0 | | | | | | | | | | | 19 | 50 | 2 | 76 | 2 | | | 0 | 0 |
| 7 | 2 | 62 | 36 | 27 | 9 | 17 | 56 | 9 | 70 | 7 | 40 | 110 | 0 | 2 | | | | | | | | | | | 33 | 50 | 3 | 76 | 3 | | | 0 | 0 |
| 7 | 17 | 62 | 9 | 26 | 36 | 18 | 82 | 11 | 26 | 6 | 39 | 0 | 0 | 0 | | | | | | | | | | | 7 | 50 | 1 | 76 | 1 | | | 0 | 0 |
| 8 | 7 | 62 | 36 | 48 | 65 | 9 | 82 | 5 | 58 | 4 | 34 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 21 | 62 | 36 | 21 | 70 | 9 | 71 | 8 | 82 | 5 | 57 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 67 | 16 | 36 | 15 | 71 | 8 | 9 | 8 | 53 | 0 | 0 | 3 | | | | | | | | | | | 2 | | | | | | | 0 | 1 |
| 9 | 18 | 62 | 36 | 12 | 65 | 8 | 71 | 7 | 64 | 5 | 68 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** MISSOURI-SOURIS RIVERS

**STATION LOCATION** MISSOURI RIVER AT
BISMARCK, NORTH DAKOTA

33

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 10 | 13 | 61 | 11 | 5 | 2168 | 224 | 58 | 166 | 2 | 17 | 13 | 2 | 1 | 10 | 0 | 6 | 5 | 2 | 13 |
| 11 | 22 | 61 | 12 | 15 | 2237 | 198 | 21 | 177 | 1 | 7 | 7 | 1 | 1 | 5 | 0 | 2 | 1 | 0 | 3 |
| 2 | 1 | 62 | 2 | 24 | 2237 | 233 | 53 | 180 | 6 | 15 | 13 | 2 | 2 | 8 | 1 | 5 | 4 | 1 | 9 |
| 3 | 21 | 62 | 4 | 14 | 2377 | 156 | 52 | 104 | 3 | 16 | 14 | 2 | 1 | 11 | 0 | 5 | 5 | 1 | 8 |
| 5 | 1 | 62 | 5 | 20 | 1860 | 215 | 78 | 137 | 2 | 20 | 24 | 5 | 1 | 18 | 0 | 8 | 8 | 1 | 15 |
| 6 | 19 | 62 | 7 | 2 | 1267 | 218 | 86 | 132 | 2 | 27 | 21 | 3 | 2 | 15 | 1 | 8 | 7 | 2 | 19 |
| 7 | 27 | 62 | 8 | 19 | 2243 | 242 | 92 | 150 | 4 | 27 | 25 | 2 | 1 | 22 | 0 | 8 | 7 | 2 | 19 |
| 9 | 9 | 62 | 10 | 2 | 2168 | 170 | 49 | 121 | 1 | 17 | 11 | 1 | 0 | 10 | 0 | 7 | 2 | 2 | 9 |

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** NORTH DAKOTA
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** MISSOURI-SOURIS RIVERS
**STATION LOCATION** MISSOURI RIVER AT
BISMARCK, NORTH DAKOTA 33

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 3 | 61 | - | - | 8.2 | - | - | - | - | .2 | 162 | 224 | 4 | 35 | - | - | - | - | 10 |
| 10 | 10 | 61 | - | - | 8.3 | - | - | - | - | .3 | - | 162 | 224 | 4 | 25 | - | - | - | 60 |
| 10 | 19 | 61 | 10.5 | 9.9 | 8.0 | - | 20 | - | - | .2 | 7 | 162 | 224 | 4 | 25 | 178 | .0 | 474 | 150 |
| 10 | 25 | 61 | 8.3 | 10.4 | 8.2 | .8 | 11 | 2.6 | 3.7 | .3 | 9 | 158 | 220 | 3 | 35 | 170 | .0 | 446 | 220 |
| 10 | 31 | 61 | - | - | 8.3 | - | - | - | - | - | - | 160 | 224 | 2 | 68 | - | - | - | 180 |
| 11 | 7 | 61 | 7.0 | 11.9 | 8.1 | .9 | 14 | 1.0 | 2.6 | .2 | 8 | 158 | 226 | 2 | 69 | 173 | .0 | 440 | 100 |
| 11 | 13 | 61 | - | - | 8.3 | - | - | - | - | .1 | 11 | 158 | 224 | 5 | 40 | 172 | .1 | 421 | 170 |
| 11 | 22 | 61 | 3.2 | 12.0 | 8.2 | .5 | 14 | - | - | .2 | 9 | 158 | 222 | 3 | 35 | 172 | .1 | 458 | 80 |
| 11 | 23 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 80 |
| 11 | 28 | 61 | - | - | 8.2 | - | - | - | - | - | 9 | 158 | 226 | 12 | 70 | 165 | .0 | 424 | 24 |
| 12 | 5 | 61 | - | - | 8.3 | - | - | - | - | - | 9 | 156 | 218 | 0 | 35 | 165 | .0 | 444 | 52 |
| 12 | 12 | 61 | .4 | 13.7 | 8.3 | .8 | 13 | 1.1 | 2.1 | .6 | 9 | 160 | 222 | 0 | 28 | 183 | .0 | 456 | 20 |
| 12 | 18 | 61 | - | - | - | - | 7 | - | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 19 | 61 | - | - | 8.2 | - | - | - | - | .3 | 11 | 158 | 222 | 0 | 20 | 105 | .0 | 425 | 11 |
| 1 | 2 | 62 | - | - | 8.2 | - | - | - | - | .2 | 11 | 152 | 216 | 3 | 20 | 163 | .0 | 416 | 59 |
| 1 | 3 | 62 | .8 | - | 8.2 | .6 | 13 | 1.1 | - | .2 | 8 | 152 | 216 | 3 | 20 | 178 | .0 | 429 | - |
| 1 | 9 | 62 | - | - | 8.4 | - | - | - | - | .2 | - | 154 | 216 | 15 | 20 | 145 | .0 | 404 | *1 |
| 1 | 16 | 62 | .4 | 13.0 | 8.5 | - | 13 | - | - | .2 | 9 | 150 | 210 | 10 | 20 | 155 | .0 | 408 | *1 |
| 1 | 23 | 62 | - | - | 8.3 | - | - | - | - | .4 | - | 150 | 224 | 5 | 20 | 170 | .0 | 417 | *1 |
| 1 | 31 | 62 | .3 | 12.7 | 8.3 | .5 | 12 | - | - | .1 | 8 | 152 | 220 | 10 | 20 | 165 | .0 | 429 | 5 |
| 2 | 6 | 62 | - | - | 8.3 | - | - | - | - | .3 | - | 154 | 220 | 5 | 20 | - | - | - | 48 |
| 2 | 13 | 62 | .4 | 12.5 | 8.3 | - | 14 | 1.5 | - | .3 | 6 | 156 | 226 | 5 | 27 | 170 | .0 | 423 | 64 |
| 2 | 20 | 62 | - | - | 8.3 | - | - | - | - | .5 | - | 154 | 224 | 5 | 20 | - | - | - | 63 |
| 2 | 27 | 62 | - | - | 8.3 | - | 9 | - | - | .2 | - | 156 | 228 | 5 | 20 | - | - | - | 10 |
| 3 | 6 | 62 | .4 | 12.7 | 8.3 | .7 | 15 | 1.5 | 3.0 | .3 | 8 | 154 | 234 | 5 | 20 | 185 | .0 | 449 | 40 |
| 3 | 13 | 62 | - | - | 8.2 | - | - | - | - | .4 | - | 158 | 232 | 5 | 15 | - | - | - | 15 |
| 3 | 21 | 62 | .8 | 12.4 | 8.2 | - | 14 | 1.7 | - | .2 | 8 | 158 | 230 | 5 | 20 | 175 | .0 | 449 | 36 |
| 3 | 27 | 62 | - | - | 8.2 | - | - | - | - | .3 | - | 156 | 226 | 15 | 30 | - | - | - | 76 |
| 4 | 4 | 62 | 2.2 | 12.6 | 8.2 | - | 14 | 1.7 | 3.3 | .3 | 10 | 164 | 228 | 15 | 32 | 170 | .0 | 471 | 36 |
| 4 | 10 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 16 |
| 4 | 11 | 62 | - | - | 8.3 | - | - | - | - | .2 | - | 166 | 234 | 10 | 45 | - | - | - | 16 |
| 4 | 16 | 62 | - | - | - | - | 32 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 17 | 62 | - | - | 8.3 | - | - | - | - | .1 | - | 168 | 238 | 15 | 50 | - | - | - | *1 |
| 4 | 24 | 62 | - | - | 8.2 | - | - | - | - | .3 | - | 166 | 246 | 3 | 30 | - | - | - | 3 |
| 5 | 1 | 62 | 6.8 | 11.8 | 8.1 | - | 14 | 1.4 | - | .2 | 9 | 172 | 252 | 5 | 30 | 175 | .0 | - | *4 |
| 5 | 8 | 62 | - | - | 8.3 | - | - | - | - | .2 | - | 160 | 240 | 0 | 25 | - | - | - | *1 |
| 5 | 15 | 62 | 8.7 | 11.0 | 8.2 | - | 14 | .8 | 2.4 | .3 | 8 | 164 | 238 | 0 | 65 | 170 | .0 | 417 | 52 |
| 5 | 22 | 62 | - | - | 8.4 | - | - | - | - | .3 | - | 162 | 242 | 2 | 35 | - | - | - | 30 |
| 5 | 24 | 62 | - | - | - | - | 27 | - | - | - | - | - | - | - | - | - | - | - | - |

**MINOR BASIN** MISSOURI-SOURIS RIVERS

**STATION LOCATION** MISSOURI RIVER AT

BISMARCK, NORTH DAKOTA 33

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORM per 100 m |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 5 | 62 | - | - | 8.4 | - | - | - | - | .2 | - | 160 | 230 | 7 | 120 | - | - | - | |
| 6 | 12 | 62 | 15.0 | 9.5 | 8.2 | - | 13 | - | - | .2 | 9 | 160 | 236 | 8 | 55 | 190 | .0 | 487 | 8 |
| 6 | 19 | 62 | - | - | 8.1 | - | - | - | - | .2 | - | 162 | 238 | 50 | 200 | - | - | - | 8 |
| 6 | 26 | 62 | 17.3 | 8.6 | 8.1 | .8 | - | - | - | .2 | 9 | 166 | 208 | - | 240 | 193 | .0 | 487 | |
| 7 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3 |
| 7 | 3 | 62 | - | - | 8.1 | - | 15 | - | - | .4 | - | 164 | 226 | 15 | 35 | - | - | - | |
| 7 | 10 | 62 | - | - | 7.9 | - | - | - | - | .3 | - | 160 | 220 | 15 | 200 | - | - | - | |
| 7 | 17 | 62 | - | - | 8.1 | - | - | - | - | .3 | 9 | 162 | 232 | 3 | 35 | 180 | .0 | 465 | 18 |
| 7 | 24 | 62 | - | - | 8.0 | - | - | - | - | .3 | - | 166 | 216 | 7 | 90 | - | - | - | 26 |
| 7 | 31 | 62 | 19.5 | - | 8.1 | - | - | - | - | .2 | 8 | 166 | 224 | 7 | 45 | 175 | .0 | 450 | |
| 8 | 4 | 62 | 18.8 | - | 8.2 | - | - | - | - | .2 | - | 158 | 220 | 15 | 35 | - | - | - | 1 |
| 8 | 7 | 62 | 20.0 | - | 8.2 | - | - | - | - | .2 | 7 | 162 | 220 | 8 | 35 | 170 | .0 | - | 6 |
| 8 | 14 | 62 | 20.0 | - | 8.1 | - | - | - | - | .2 | 7 | 162 | 220 | 7 | 40 | 180 | .0 | - | 5 |
| 8 | 21 | 62 | 20.0 | - | 8.2 | - | - | - | - | .2 | - | 166 | 218 | 5 | 37 | - | - | - | 4 |
| 8 | 23 | 62 | - | - | - | - | 11 | - | - | - | - | - | - | - | - | - | - | - | |
| 8 | 28 | 62 | 20.0 | - | 8.2 | - | - | - | - | .2 | - | 160 | 222 | 5 | 40 | - | - | - | 14 |
| 9 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5 |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | 8 | - | - | - | - | 170 | .1 | 450 | |
| 9 | 11 | 62 | 15.5 | - | 8.2 | - | - | - | - | .1 | - | 158 | 220 | 15 | 30 | - | - | - | 15 |
| 9 | 18 | 62 | 17.1 | - | 8.1 | - | - | - | - | .2 | - | 162 | 220 | 5 | 31 | - | - | - | |
| 9 | 25 | 62 | - | - | 8.1 | - | - | - | - | .2 | 10 | 158 | 118 | 5 | 35 | 125 | .0 | 431 | |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Bismarck, North Dakota
Operated by U.S. Geological Survey

MAJOR BASIN Missouri River

MINOR BASIN Missouri-Souris Rivers

STATION LOCATION Missouri River at

Bismarck, North Dakota

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7.020 | 24.800 | 15.600 | 22.400 | 24.100 | 22.500 | 26.100 | 18.400 | 29.200 | 9.310 | 11.700 | 8.300 |
| 2 | 7.120 | 24.200 | 14.900 | 22.400 | 24.200 | 22.500 | 25.900 | 18.400 | 25.800 | 8.610 | 8.530 | 7.830 |
| 3 | 6.790 | 24.300 | 15.000 | 22.500 | 23.900 | 23.300 | 26.400 | 17.700 | 24.000 | 8.110 | 9.170 | 7.670 |
| 4 | 6.680 | 26.000 | 15.200 | 21.800 | 24.200 | 23.300 | 25.000 | 18.200 | 20.700 | 8.530 | 10.400 | 7.750 |
| 5 | 6.910 | 26.400 | 15.700 | 22.200 | 24.400 | 22.800 | 23.000 | 17.700 | 24.400 | 8.990 | 12.600 | 7.380 |
| 6 | 7.000 | 25.800 | 15.000 | 21.800 | 22.200 | 22.900 | 22.600 | 16.600 | 29.700 | 8.400 | 12.600 | 6.660 |
| 7 | 6.950 | 26.700 | 15.100 | 21.800 | 22.500 | 23.700 | 22.500 | 16.600 | 31.600 | 11.500 | 11.100 | 6.820 |
| 8 | 6.770 | 27.600 | 15.000 | 22.000 | 23.900 | 23.700 | 25.200 | 16.100 | 32.100 | 14.200 | 10.500 | 6.360 |
| 9 | 6.910 | 29.000 | 12.000 | 20.000 | 24.500 | 23.700 | 25.300 | 16.000 | 28.000 | 16.200 | 12.200 | 7.060 |
| 10 | 6.880 | 28.700 | 12.000 | 19.000 | 24.500 | 23.200 | 26.700 | 18.400 | 28.900 | 15.600 | 13.300 | 6.580 |
| 11 | 7.960 | 27.800 | 12.000 | 21.000 | 24.500 | 23.100 | 27.200 | 20.700 | 27.400 | 16.900 | 12.900 | 6.680 |
| 12 | 10.800 | 27.800 | 12.000 | 21.400 | 24.800 | 23.500 | 27.400 | 22.100 | 27.200 | 18.500 | 11.800 | 6.750 |
| 13 | 12.300 | 27.900 | 13.000 | 21.500 | 24.600 | 23.000 | 26.900 | 22.300 | 31.900 | 18.900 | 9.940 | 7.280 |
| 14 | 12.800 | 28.700 | 13.000 | 21.700 | 24.200 | 22.900 | 24.200 | 23.400 | 32.500 | 16.600 | 8.500 | 8.330 |
| 15 | 13.500 | 29.300 | 13.000 | 21.600 | 24.200 | 23.500 | 21.600 | 23.000 | 32.300 | 10.100 | 8.240 | 7.360 |
| 16 | 13.500 | 29.400 | 13.000 | 20.800 | 24.500 | 24.000 | 20.800 | 24.700 | 31.100 | 7.530 | 7.730 | 7.160 |
| 17 | 18.400 | 29.600 | 13.000 | 21.600 | 23.800 | 23.200 | 21.400 | 26.200 | 30.800 | 11.700 | 6.910 | 6.780 |
| 18 | 21.600 | 29.800 | 13.400 | 22.200 | 23.500 | 22.500 | 23.600 | 23.700 | 27.400 | 18.400 | 6.840 | 6.920 |
| 19 | 23.800 | 29.800 | 13.600 | 22.400 | 24.300 | 22.100 | 23.300 | 21.700 | 25.200 | 16.400 | 6.880 | 6.990 |
| 20 | 24.800 | 29.000 | 13.700 | 22.600 | 23.300 | 21.700 | 24.000 | 24.400 | 16.900 | 16.100 | 6.460 | 6.870 |
| 21 | 25.900 | 27.300 | 15.000 | 23.100 | 23.600 | 22.300 | 24.700 | 23.900 | 12.200 | 17.700 | 6.680 | 6.750 |
| 22 | 26.600 | 26.300 | 17.300 | 24.100 | 22.800 | 22.500 | 24.900 | 24.300 | 10.300 | 16.800 | 7.280 | 6.700 |
| 23 | 25.200 | 25.000 | 19.200 | 23.300 | 22.700 | 23.000 | 23.900 | 25.300 | 10.700 | 16.100 | 8.940 | 6.780 |
| 24 | 25.800 | 21.200 | 20.400 | 23.600 | 22.900 | 24.000 | 20.500 | 26.000 | 10.400 | 16.800 | 9.210 | 6.920 |
| 25 | 26.000 | 18.200 | 22.000 | 24.000 | 22.900 | 24.500 | 19.600 | 25.600 | 9.670 | 18.900 | 8.330 | 8.880 |
| 26 | 26.400 | 19.800 | 22.100 | 24.200 | 23.900 | 25.300 | 19.900 | 26.100 | 10.300 | 16.200 | 7.570 | 12.200 |
| 27 | 26.100 | 18.900 | 21.700 | 24.600 | 22.300 | 25.900 | 19.600 | 26.400 | 12.300 | 14.700 | 7.670 | 13.000 |
| 28 | 24.800 | 16.800 | 22.000 | 24.000 | 22.400 | 26.800 | 19.700 | 26.000 | 9.200 | 15.600 | 8.080 | 13.500 |
| 29 | 24.800 | 15.800 | 22.000 | 24.200 |  | 27.200 | 21.200 | 26.200 | 11.200 | 11.700 | 8.330 | 13.400 |
| 30 | 23.800 | 15.600 | 22.200 | 23.900 |  | 26.000 | 19.500 | 27.000 | 10.800 | 8.800 | 8.330 | 12.400 |
| 31 | 23.700 |  | 22.400 | 24.500 |  | 26.100 |  | 27.600 |  | 9.940 | 8.580 |  |

**STATION LOCATION** MISSOURI RIVER AT

WILLISTON, NORTH DAKOTA 34

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 11 | 7 | - | - | - | - | - | - | 45 | 22 | 6 | 14 | 51 | 26 | | | | | | |
| 10 | 9 | 61 | 10 | 30 | - | - | - | - | - | - | 14 | 15 | 7 | 14 | 21 | 21 | | | | | | |
| 10 | 16 | 61 | 10 | 30 | - | - | - | - | - | - | 35 | 17 | 21 | 14 | 56 | 22 | | | | | | |
| 10 | 23 | 61 | 11 | 3 | 15 | 9 | 3 | 2 | 18 | 9 | 56 | 17 | 6 | 10 | 62 | 20 | | | | | | |
| 10 | 29 | 61 | 11 | 7 | 1 | 2 | 4 | 3 | 5 | 4 | 19 | 11 | 23 | 11 | 42 | 16 | | | | | | |
| 11 | 6 | 61 | 11 | 21 | - | - | - | - | - | - | 44 | 14 | 57 | 15 | 101 | 21 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | - | - | - | - | - | - | 23 | 14 | 30 | 15 | 53 | 21 | | | | | | |
| 11 | 27 | 61 | 12 | 7 | 1 | 1 | 5 | 3 | 6 | 3 | 12 | 5 | 24 | 7 | 36 | 9 | | | | | | |
| 12 | 4 | 61 | 12 | 18 | - | - | - | - | - | - | 0 | 11 | 11 | 15 | 11 | 19 | | | | | | |
| 12 | 11 | 61 | 12 | 26 | - | - | - | - | - | - | 5 | 11 | 22 | 14 | 27 | 18 | | | | | | |
| 12 | 18 | 61 | 1 | 2 | - | - | - | - | - | - | 7 | 11 | 23 | 15 | 30 | 19 | | | | | | |
| 12 | 26 | 61 | 1 | 4 | - | - | - | - | - | - | 1 | 8 | 20 | 12 | 21 | 14 | | | | | | |
| 1 | 2 | 62 | 1 | 12 | - | - | - | - | - | - | 14 | 11 | 15 | 14 | 29 | 18 | | | | | | |
| 1 | 8 | 62 | 1 | 19 | - | - | - | - | - | - | 5 | 11 | 8 | 14 | 13 | 18 | | | | | | |
| 1 | 15 | 62 | 1 | 29 | - | - | - | - | - | - | 0 | 10 | 7 | 13 | 7 | 16 | | | | | | |
| 1 | 22 | 62 | 1 | 31 | 1 | 1 | 2 | 2 | 3 | 2 | 4 | 8 | 14 | 11 | 18 | 14 | | | | | | |
| 1 | 29 | 62 | 2 | 7 | - | - | - | - | - | - | 1 | 8 | 26 | 11 | 27 | 14 | | | | | | |
| 2 | 5 | 62 | 2 | 15 | - | - | - | - | - | - | 21 | 10 | 20 | 11 | 41 | 15 | | | | | | |
| 2 | 12 | 62 | 2 | 20 | - | - | - | - | - | - | 25 | 12 | 36 | 14 | 61 | 18 | | | | | | |
| 2 | 19 | 62 | 3 | 6 | - | - | - | - | - | - | 17 | 19 | 20 | 15 | 37 | 24 | | | | | | |
| 2 | 26 | 62 | 3 | 12 | 1 | 1 | 2 | 2 | 3 | 2 | 12 | 9 | 24 | 11 | 36 | 14 | | | | | | |
| 3 | 5 | 62 | 3 | 19 | - | - | - | - | - | - | 0 | 11 | 7 | 14 | 7 | 18 | | | | | | |
| 3 | 12 | 62 | 4 | 3 | - | - | - | - | - | - | 6 | 11 | 21 | 12 | 27 | 16 | | | | | | |
| 3 | 19 | 62 | 4 | 3 | - | - | - | - | - | - | 21 | 9 | 13 | 11 | 34 | 14 | | | | | | |
| 3 | 26 | 62 | 4 | 11 | 2 | 3 | 3 | 2 | 5 | 3 | 49 | 13 | 30 | 10 | 79 | 16 | | | | | | |
| 4 | 2 | 62 | 4 | 16 | - | - | - | - | - | - | 93 | 18 | 35 | 13 | 128 | 22 | | | | | | |
| 4 | 8 | 62 | 4 | 27 | - | - | - | - | - | - | 41 | 23 | 13 | 15 | 54 | 27 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 34 | 16 | 25 | 16 | 59 | 23 | | | | | | |
| 4 | 23 | 62 | 5 | 25 | 2 | 3 | 5 | 4 | 7 | 5 | 20 | 16 | 35 | 15 | 55 | 23 | | | | | | |
| 4 | 30 | 62 | 6 | 4 | - | - | - | - | - | - | 148 | 59 | 22 | 17 | 170 | 61 | | | | | | |
| 5 | 7 | 62 | 7 | 18 | - | - | - | - | - | - | 58 | 20 | 18 | 13 | 76 | 24 | | | | | | |
| 5 | 14 | 62 | 7 | 27 | - | - | - | - | - | - | 100 | 20 | 31 | 12 | 131 | 23 | | | | | | |
| 5 | 21 | 62 | 6 | 28 | - | - | - | - | - | - | 770 | 25 | 45 | 8 | 815 | 26 | | | | | | |
| 5 | 28 | 62 | 7 | 3 | 120 | 63 | 3 | 4 | 123 | 63 | 238 | 34 | 29 | 17 | 267 | 38 | | | | | | |
| 6 | 4 | 62 | 7 | 6 | - | - | - | - | - | - | 1444 | 120 | 34 | 13 | 1478 | 121 | | | | | | |
| 6 | 11 | 62 | 7 | 9 | - | - | - | - | - | - | 256 | 100 | 30 | 14 | 286 | 101 | | | | | | |
| 6 | 18 | 62 | 7 | 17 | - | - | - | - | - | - | 381 | 104 | 80 | 8 | 461 | 104 | | | | | | |
| 6 | 25 | 62 | 7 | 20 | 114 | 55 | 4 | 2 | 118 | 55 | 832 | 133 | 10 | 7 | 842 | 133 | | | | | | |
| 7 | 2 | 62 | 8 | 6 | - | - | - | - | - | - | 99 | 50 | 3 | 6 | 102 | 50 | | | | | | |
| 7 | 9 | 62 | 8 | 8 | - | - | - | - | - | - | 76 | 58 | 19 | 9 | 95 | 59 | | | | | | |

| DATE SAMPLE TAKEN | | | DATE OF DETERMINATION | | RADIOACTIVITY IN WATER | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 7 | 16 | 62 | 8 | 9 | - | - | - | - | - | - | 336 | 114 | 33 | 13 | 369 | 114 | | | | | | |
| 7 | 23 | 62 | 9 | 29 | 0 | 41 | 0 | 1 | 0 | 41 | 364 | 47 | 47 | 7 | 411 | 48 | | | | | | |
| 7 | 30 | 62 | 8 | 23 | - | - | - | - | - | - | 94 | 23 | 28 | 13 | 122 | 26 | | | | | | |
| 8 | 6 | 62 | 8 | 28 | - | - | - | - | - | - | 145 | 22 | 36 | 15 | 181 | 27 | | | | | | |
| 8 | 13 | 62 | 8 | 27 | - | - | - | - | - | - | 4 | 35 | 32 | 7 | 36 | 36 | | | | | | |
| 8 | 20 | 62 | 9 | 5 | - | - | - | - | - | - | 100 | 73 | 35 | 15 | 135 | 75 | | | | | | |
| 8 | 28 | 62 | 9 | 26 | - | - | - | - | - | - | 43 | 41 | 23 | 17 | 66 | 44 | | | | | | |
| 9 | 4 | 62 | 10 | 2 | - | - | - | - | - | - | 54 | 25 | 11 | 12 | 65 | 28 | | | | | | |
| 9 | 10 | 62 | 10 | 9 | - | - | - | - | - | - | 37 | 23 | 22 | 15 | 59 | 27 | | | | | | |
| 9 | 17 | 62 | 10 | 9 | - | - | - | - | - | - | 35 | 15 | 15 | 15 | 50 | 21 | | | | | | |
| 9 | 24 | 62 | 10 | 17 | 0 | 1 | 4 | 3 | 4 | 3 | 6 | 16 | 24 | 18 | 30 | 24 | | | | | | |

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 400 | 0 | 20 | 40 | 0 | 0 | 0 | 50 | 250 | 70 | 960 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 1700 | 0 | 0 | 20 | 0 | 0 | 0 | 170 | 1510 | 40 | 170 | 92 | 2 | 82 | 1 | 77 | 1 | 87 | 1 | | | | | | | | | | | | |
| 11 | 6 | 61 | 900 | 0 | 0 | 20 | 0 | 0 | 0 | 40 | 870 | 0 | 60 | 77 | 2 | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 1200 | 0 | 0 | 20 | 0 | 20 | 0 | 0 | 1120 | 0 | 60 | 77 | 3 | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 430 | 0 | 0 | 77 | 2 | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 200 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 170 | 0 | 40 | 77 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 500 | 0 | 0 | 0 | 0 | 50 | 0 | 0 | 430 | 0 | 0 | 77 | 2 | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 600 | 0 | 0 | 20 | 0 | 20 | 20 | 50 | 450 | 20 | 90 | 77 | 2 | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 900 | 0 | 0 | 20 | 0 | 0 | 0 | 50 | 810 | 0 | 0 | 77 | 3 | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 430 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 200 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 110 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 180 | 0 | 70 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 0 | 800 | 87 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 1700 | 0 | 0 | 70 | 0 | 140 | 0 | 230 | 1310 | 0 | 230 | 87 | 2 | 85 | 1 | 77 | 1 | 71 | 1 | 82 | 1 | | | | | | | | | | |
| 5 | 7 | 62 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 340 | 130 | 890 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 2200 | 0 | 0 | 20 | 0 | 0 | 0 | 840 | 1350 | 340 | 2450 | 71 | 3 | 92 | 1 | 82 | 1 | | | | | | | | | | | | | | |
| 6 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | | | | | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 3900 | 0 | 0 | 0 | 40 | 0 | 0 | 540 | 3270 | 120 | 120 | 87 | 3 | 92 | 2 | 82 | 2 | 88 | 2 | 71 | 1 | 81 | 1 | 68 | 1 | 86 | 1 | 85 | 1 | 79 | 1 |
| 7 | 2 | 62 | 1600 | 0 | 20 | 60 | 40 | 210 | 40 | 150 | 1060 | 0 | 120 | 82 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 1900 | 0 | 0 | 120 | 0 | 460 | 0 | 330 | 950 | 0 | 120 | 82 | 2 | 92 | 1 | 57 | 1 | 71 | 1 | 51 | 1 | | | | | | | | | | |
| 8 | 20 | 62 | 1000 | 0 | 0 | 0 | 40 | 60 | 0 | 250 | 660 | 0 | 0 | 87 | 1 | 82 | 1 | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 24100 | 100 | 0 | 1860 | * | 1260 | 170 | 2770 | 5920 | 410 | 1120 | 50 | 7 | 68 | 4 | 92 | 4 | 38 | 3 | 51 | 3 | 87 | 3 | 88 | 3 | 81 | 3 | 79 | 2 | 82 | 2 |
| 9 | 17 | 62 | 700 | 0 | 0 | 180 | 0 | 100 | 0 | 110 | 310 | 100 | 120 | | | | | | | | | | | | | | | | | | | | |
| *9 | 4 | 62 | | | | | 11960 | | | | | | | | | | | | | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** NORTH DAKOTA

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** MISSOURI-SOURIS RIVERS

**STATION LOCATION** MISSOURI RIVER AT
WILLISTON, NORTH DAKOTA 034

| DATE OF SAMPLE MONTH | DAY | YEAR | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) 1ST SPECIES | 1ST PERCENT | 2ND SPECIES | 2ND PERCENT | 3RD SPECIES | 3RD PERCENT | 4TH SPECIES | 4TH PERCENT | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES PROTOZOA (Identifiable) Number per ml. | ROTIFERS NUMBER PER LITER | ROTIFERS GENERA AND COUNT LEVEL (See text for Codes) 1ST GENUS | 1ST COUNT LEVEL | 2ND GENUS | 2ND COUNT LEVEL | 3RD GENUS | 3RD COUNT LEVEL | 4TH GENUS | 4TH COUNT LEVEL | 5TH GENUS | 5TH COUNT LEVEL | CRUSTACEA NUMBER PER LITER | CRUSTACEA GENERA AND COUNT LEVEL (See text for Codes) 1ST GENUS | 1ST COUNT LEVEL | 2ND GENUS | 2ND COUNT LEVEL | 3RD GENUS | 3RD COUNT LEVEL | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 2 | 61 | 92 | 18 | 36 | 17 | 41 | 11 | 15 | 6 | 48 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 92 | 24 | 9 | 16 | 36 | 14 | 75 | 6 | 40 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 92 | 52 | 36 | 15 | 83 | 7 | 9 | 6 | 20 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 92 | 39 | 9 | 18 | 36 | 17 | 71 | 3 | 23 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 9 | 87 | 86 | 3 | 92 | 3 | 56 | 1 | 6 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 9 | 94 | | 1 | | 1 | | 1 | 3 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 9 | 72 | 92 | 7 | 64 | 3 | 71 | 3 | 15 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 9 | 86 | 36 | 4 | 92 | 3 | 80 | 1 | 6 | 140 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 92 | 20 | 36 | 14 | 9 | 13 | 46 | 9 | 44 | 70 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 36 | 22 | 9 | 18 | 92 | 17 | 68 | 5 | 38 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 9 | 24 | 36 | 23 | 65 | 8 | 92 | 6 | 39 | 0 | 0 | 0 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 36 | 16 | 92 | 13 | 65 | 12 | 80 | 10 | 49 | 0 | 0 | 0 | | | | | | | | | | | 4 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 92 | 16 | 36 | 15 | 65 | 6 | 86 | 5 | 58 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | | | | | | | | | | - | - | - | | | | | | | | | | | - | | | | | | | - | - |
| 6 | 18 | 62 | 92 | 16 | 36 | 14 | 65 | 9 | 64 | 5 | 56 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 36 | 25 | 92 | 22 | 65 | 7 | 41 | 5 | 41 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | | | | | | | | | | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 6 | 62 | 36 | 29 | 92 | 25 | 47 | 9 | 97 | 5 | 32 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 20 | 62 | 36 | 21 | 92 | 7 | 65 | 7 | 80 | 5 | 60 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 9 | 4 | 62 | 26 | 35 | 92 | 12 | 58 | 5 | 16 | 4 | 44 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 26 | 29 | 92 | 8 | 27 | 6 | 70 | 6 | 51 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** NORTH DAKOTA
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** MISSOURI-SOURIS RIVERS
**STATION LOCATION** MISSOURI RIVER AT
WILLISTON, NORTH DAKOTA

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES |
| 11 | 8 | 61 | 11 | 17 | 5145 | 64 | 9 | 55 | 0 | 2 | 5 | 1 | 0 | 4 | 0 | 1 | 0 | |
| 12 | 12 | 61 | 12 | 27 | 5363 | 100 | 30 | 70 | 2 | 11 | 6 | 0 | 0 | 6 | 0 | 2 | 2 | |
| 1 | 19 | 62 | 2 | 6 | 5025 | 97 | 16 | 81 | 0 | 4 | 6 | 1 | 1 | 4 | 0 | 2 | 1 | |
| 2 | 28 | 62 | 3 | 13 | 5400 | 111 | 39 | 72 | 0 | 12 | 11 | 1 | 1 | 7 | 2 | 4 | 1 | |
| 4 | 3 | 62 | 4 | 17 | 5250 | 105 | 37 | 68 | 0 | 10 | 13 | 2 | 1 | 9 | 1 | 4 | 2 | |
| 4 | 17 | 62 | 4 | 28 | 5550 | 93 | 36 | 57 | 1 | 10 | 10 | 1 | 1 | 8 | 0 | 4 | 3 | |
| 5 | 2 | 62 | 5 | 9 | 5850 | 94 | 42 | 52 | 3 | 10 | 11 | 1 | 1 | 9 | 0 | 4 | 3 | |
| 5 | 17 | 62 | 5 | 25 | 6090 | 79 | 32 | 47 | 1 | 10 | 8 | 1 | 0 | 6 | 1 | 3 | 2 | |
| 5 | 28 | 62 | 6 | 5 | 6820 | * | 44 | * | 3 | 12 | 11 | 1 | 1 | 8 | 1 | 5 | 4 | |
| 6 | 20 | 62 | 7 | 3 | 6270 | 88 | 45 | 43 | 1 | 12 | 11 | 1 | 1 | 8 | 1 | 5 | 4 | |
| 7 | 3 | 62 | 7 | 18 | 5250 | 75 | 28 | 47 | 1 | 7 | 7 | 1 | 1 | 5 | 0 | 3 | 2 | |
| 7 | 19 | 62 | 7 | 30 | 5422 | 58 | 22 | 36 | 0 | 6 | 7 | 2 | 0 | 5 | 0 | 3 | 1 | |
| 8 | 9 | 62 | 8 | 21 | 5460 | 93 | 35 | 58 | 1 | 7 | 15 | 5 | 3 | 6 | 1 | 4 | 2 | |
| 8 | 23 | 62 | 9 | 6 | 5137 | 83 | 27 | 56 | 0 | 4 | 18 | 7 | 5 | 5 | 1 | 2 | 1 | |
| 9 | 7 | 62 | 9 | 27 | 5205 | 116 | 36 | 80 | 1 | 9 | 13 | 3 | 2 | 7 | 1 | 4 | 2 | |
| 9 | 28 | 62 | 10 | 17 | 4860 | 110 | 20 | 90 | 1 | 3 | 11 | 3 | 2 | 6 | 0 | 2 | 1 | |

* NOT REPORTED - OVERHEATED

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | .9 | - | 8.4 | - | - | - | - | - | - | 148 | 228 | - | 625 | - | .4 | - | - |
| 10 | 9 | 61 | 1.0 | - | 8.4 | - | - | - | - | - | - | 166 | 234 | - | 350 | - | .4 | - | - |
| 10 | 16 | 61 | 1.1 | - | 8.3 | - | - | - | - | - | - | 150 | 230 | - | 310 | - | .3 | - | - |
| 10 | 17 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 540 |
| 10 | 23 | 61 | .6 | - | 8.3 | - | - | - | - | - | - | 170 | 230 | - | 1600 | - | .5 | - | 2900 |
| 10 | 25 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2900 |
| 10 | 29 | 61 | .4 | - | 8.2 | - | - | - | - | .2 | - | 162 | 222 | - | 290 | - | - | - | - |
| 10 | 31 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2300 |
| 11 | 6 | 61 | .6 | 10.9 | 8.1 | - | - | - | - | .2 | - | 158 | 236 | - | 150 | 130 | .3 | - | - |
| 11 | 14 | 61 | .5 | 12.2 | 8.2 | - | - | - | - | .7 | - | 156 | 240 | - | 290 | - | - | - | 1500 |
| 11 | 17 | 61 | - | - | - | - | 22 | - | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 20 | 61 | 2.0 | 13.0 | 8.3 | - | - | - | - | - | - | 164 | 240 | - | 260 | - | - | - | - |
| 11 | 27 | 61 | 3.0 | 10.5 | 8.1 | - | - | - | - | .3 | - | 152 | 240 | - | 90 | - | .4 | - | 900 |
| 12 | 3 | 61 | .5 | - | 8.4 | - | - | - | - | - | - | 162 | 240 | - | 5 | - | .3 | - | - |
| 12 | 5 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 12 | 11 | 61 | .0 | - | 8.2 | - | - | - | - | .1 | - | 168 | 246 | - | 0 | 167 | .4 | - | - |
| 12 | 18 | 61 | .0 | - | 8.2 | - | - | - | - | .1 | - | 172 | 252 | - | 0 | 167 | .2 | - | 500 |
| 12 | 26 | 61 | .0 | - | 8.3 | - | - | - | - | - | - | 176 | 266 | - | - | - | .2 | - | - |
| 12 | 27 | 61 | - | - | - | - | 50 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 2 | 62 | 1.0 | - | 8.3 | - | - | - | - | - | - | 162 | 242 | - | 0 | - | - | - | 980 |
| 1 | 8 | 62 | .0 | 8.5 | 8.2 | - | - | - | - | - | - | 156 | 228 | - | 0 | - | - | - | - |
| 1 | 10 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 180 |
| 1 | 15 | 62 | .0 | 9.5 | 8.3 | - | - | - | - | - | - | 168 | 236 | - | 0 | - | - | - | - |
| 1 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 140 |
| 1 | 22 | 62 | .0 | 8.5 | 8.3 | - | - | - | - | - | - | 170 | 242 | - | 0 | - | - | - | - |
| 1 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 600 |
| 1 | 29 | 62 | .1 | 8.5 | 8.2 | - | - | - | - | - | - | 168 | 240 | - | 310 | - | - | - | 320 |
| 2 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 414 | - |
| 2 | 5 | 62 | .0 | 9.2 | 8.3 | - | - | - | - | - | - | 156 | 230 | - | 70 | - | - | - | 110 |
| 2 | 12 | 62 | .0 | 11.3 | 8.3 | - | - | - | - | - | - | 146 | 210 | - | 135 | - | - | - | - |
| 2 | 14 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 62 |
| 2 | 19 | 62 | .0 | 15.0 | 8.1 | - | - | - | - | - | - | 138 | 230 | 10 | 590 | - | - | - | - |
| 2 | 26 | 62 | .0 | 10.5 | 8.1 | - | - | - | - | - | - | 146 | 224 | - | 64 | 175 | .0 | - | - |
| 2 | 28 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 3 | 5 | 62 | 1.0 | 9.7 | 7.9 | - | - | - | - | - | - | 162 | 240 | - | 50 | 160 | .2 | - | - |
| 3 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 25 |
| 3 | 12 | 62 | .0 | 10.- | 8.1 | - | - | - | - | .2 | - | 176 | 264 | - | 110 | - | .0 | 487 | - |
| 3 | 13 | 62 | - | - | - | - | 20 | - | - | - | - | - | - | - | - | - | - | - | 41 |
| 3 | 19 | 62 | .0 | 10.5 | 8.1 | - | - | - | - | - | - | 170 | 264 | - | 85 | 200 | .0 | 479 | 17 |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** NORTH DAKOTA
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** MISSOURI—SOURIS RIVERS
**STATION LOCATION** MISSOURI RIVER AT
WILLISTON, NORTH DAKOTA 34

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 26 | 62 | .2 | 13.5 | 8.1 | - | - | - | - | .2 | - | 130 | 185 | - | 340 | 61 | .0 | 370 | - |
| 3 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 33 |
| 4 | 2 | 62 | .3 | 14.5 | 8.2 | - | - | - | - | .7 | 24 | 128 | 186 | 40 | 800 | 175 | .0 | - | - |
| 4 | 9 | 62 | 3.0 | 15.0 | 8.3 | - | - | - | - | .2 | - | 140 | 210 | - | 700 | - | - | - | 420 |
| 4 | 16 | 62 | 8.0 | 14.0 | 8.2 | - | - | - | - | 1.1 | 36 | 156 | 238 | - | 400 | 225 | .4 | 508 | - |
| 4 | 17 | 62 | - | - | - | - | 9 | - | - | - | - | - | - | - | - | - | - | - | *100 |
| 4 | 23 | 62 | 13.0 | 12.0 | 8.3 | - | - | - | - | 3.1 | 42 | 162 | 256 | - | 350 | 220 | .0 | 520 | - |
| 4 | 28 | 62 | - | - | - | - | 31 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 30 | 62 | 13.0 | 14.2 | 8.1 | - | - | - | - | 2.5 | - | 132 | 194 | - | 1000 | - | - | - | - |
| 5 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1100 |
| 5 | 7 | 62 | 12.0 | 14.5 | 8.2 | - | - | - | - | 1.6 | 6 | 128 | 190 | - | 800 | 150 | - | - | - |
| 5 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1700 |
| 5 | 14 | 62 | 13.0 | 12.5 | 8.3 | - | - | - | - | 1.5 | 26 | 116 | 170 | - | 340 | - | - | - | 200 |
| 5 | 21 | 62 | 16.0 | 12.5 | 8.2 | - | - | - | - | 1.1 | 36 | 102 | 150 | - | 560 | - | - | - | 250 |
| 5 | 28 | 62 | 14.0 | 15.0 | 8.1 | - | - | - | - | 1.2 | - | 114 | 240 | - | 2000 | - | - | - | - |
| 5 | 29 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4500 |
| 6 | 4 | 62 | 16.0 | 14.0 | 8.1 | - | - | - | - | 1.7 | - | 112 | 180 | - | 3000 | - | .1 | - | - |
| 6 | 5 | 62 | - | - | - | - | 13 | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 6 | 11 | 62 | 20.0 | 13.0 | 8.1 | - | - | - | - | 3.0 | 7 | 106 | 166 | - | 1000 | 165 | .0 | 382 | - |
| 6 | 14 | 62 | - | - | - | - | - | - | - | - | 9 | - | - | - | - | 130 | .0 | 346 | - |
| 6 | 18 | 62 | 20.0 | - | 8.0 | - | - | - | - | - | - | 100 | 140 | - | 2000 | - | - | - | - |
| 6 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 17 |
| 6 | 25 | 62 | 21.0 | - | 8.1 | - | - | - | - | 2.5 | 22 | 96 | 156 | - | 1500 | 27 | .0 | 195 | - |
| 6 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2600 |
| 7 | 2 | 62 | 22.0 | - | 8.0 | - | 29 | - | - | 1.0 | 5 | 86 | 126 | - | 700 | 43 | .0 | - | - |
| 7 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 400 |
| 7 | 9 | 62 | 22.0 | - | 8.1 | - | - | - | - | - | - | 96 | 134 | - | 780 | - | - | - | 500 |
| 7 | 16 | 62 | 21.0 | - | 8.1 | - | - | - | - | 2.1 | - | 98 | 126 | - | 2000 | - | - | - | - |
| 7 | 18 | 62 | - | - | - | - | 25 | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 23 | 62 | 21.0 | - | 8.1 | - | - | - | - | - | 8 | 104 | 154 | - | 2000 | 82 | .0 | 405 | - |
| 7 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 900 |
| 7 | 30 | 62 | 21.0 | - | 8.1 | - | - | - | - | 3.0 | 6 | 108 | 176 | - | 600 | 150 | .0 | 350 | - |
| 7 | 31 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *100 |
| 8 | 6 | 62 | 24.0 | - | 8.1 | - | - | - | - | 2.5 | 12 | 136 | 208 | - | 450 | 175 | .0 | 477 | - |
| 8 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 800 |
| 8 | 20 | 62 | 22.0 | - | 8.8 | - | - | - | - | - | 10 | 152 | 224 | - | 800 | 190 | - | 498 | - |
| 8 | 21 | 62 | - | - | - | - | 12 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 28 | 62 | 12.0 | - | 8.4 | - | - | - | - | - | 7 | 154 | 216 | - | 250 | 175 | .0 | 465 | - |
| 8 | 29 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 130 |

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** NORTH DAKOTA
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** MISSOURI-SOURIS RIVERS
**STATION LOCATION** MISSOURI RIVER AT
WILLISTON, NORTH DAKOTA 34

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 9 | 4 | 62 | 16.0 | - | 8.1 | - | - | - | - | - | 11 | 188 | 248 | - | 280 | 192 | .0 | 500 | - |
| 9 | 6 | 62 | - | - | - | - | 15 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 10 | 62 | 14.0 | - | 8.2 | - | - | - | - | - | 11 | 164 | 236 | - | 140 | 190 | .0 | 450 | 750 |
| 9 | 17 | 62 | 14.0 | - | 8.6 | - | - | - | - | .9 | 12 | 162 | 260 | - | 140 | 195 | .0 | 531 | - |
| 9 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 30 |
| 9 | 24 | 62 | 16.0 | - | 8.5 | - | - | - | - | 1.7 | 7 | 152 | 224 | - | 130 | 170 | .0 | 500 | 1500 |
| 9 | 27 | 62 | - | - | - | - | 17 | - | - | - | - | - | - | - | - | - | - | - | - |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Williston, North Dakota
Operated by U.S. Geological Survey

MAJOR BASIN Missouri River

MINOR BASIN Missouri-Souris Rivers

STATION LOCATION Missouri River at

Williston, North Dakota

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 23.700 | 18.200 | 13.000 | 17.800 | 17.900 | 14.100 | 37.500 | 25.300 | 35.700 | 58.900 | 23.100 | 12.300 |
| 2 | 24.400 | 19.200 | 12.200 | 17.700 | 18.300 | 13.800 | 37.000 | 23.500 | 34.400 | 57.800 | 21.700 | 12.100 |
| 3 | 24.500 | 19.200 | 11.700 | 18.000 | 19.200 | 13.400 | 36.500 | 22.300 | 39.800 | 56.000 | 20.000 | 12.200 |
| 4 | 24.600 | 19.200 | 11.000 | 18.200 | 20.400 | 13.100 | 35.000 | 20.400 | 37.900 | 51.500 | 19.200 | 12.900 |
| 5 | 24.600 | 19.700 | 11.000 | 18.600 | 21.400 | 13.600 | 34.000 | 18.000 | 39.100 | 47.600 | 20.500 | 13.200 |
| 6 | 24.800 | 20.900 | 11.500 | 18.800 | 22.200 | 14.200 | 33.500 | 16.400 | 46.900 | 45.900 | 20.400 | 13.200 |
| 7 | 24.500 | 22.000 | 12.700 | 18.800 | 22.400 | 14.900 | 32.500 | 15.400 | 48.800 | 44.800 | 20.200 | 13.000 |
| 8 | 24.100 | 22.200 | 13.100 | 18.600 | 22.000 | 15.600 | 31.000 | 14.500 | 48.800 | 40.300 | 19.600 | 12.900 |
| 9 | 23.900 | 21.000 | 12.400 | 18.400 | 21.800 | 16.500 | 32.000 | 14.000 | 42.500 | 38.100 | 18.600 | 12.700 |
| 10 | 24.200 | 19.200 | 11.900 | 18.500 | 22.600 | 18.300 | 30.000 | 16.000 | 37.600 | 35.000 | 17.800 | 12.200 |
| 11 | 24.800 | 17.700 | 11.100 | 18.400 | 23.200 | 19.800 | 28.500 | 18.400 | 36.200 | 34.000 | 18.000 | 12.200 |
| 12 | 25.200 | 17.400 | 10.000 | 16.600 | 23.600 | 20.600 | 28.000 | 19.700 | 35.400 | 32.300 | 17.600 | 12.500 |
| 13 | 24.900 | 17.800 | 8.800 | 15.800 | 23.800 | 20.700 | 24.100 | 22.600 | 36.400 | 29.200 | 16.500 | 12.900 |
| 14 | 24.600 | 18.100 | 7.600 | 16.200 | 24.000 | 20.700 | 23.800 | 27.400 | 38.800 | 27.400 | 16.500 | 13.500 |
| 15 | 26.400 | 17.900 | 7.900 | 16.400 | 23.600 | 20.700 | 23.600 | 30.100 | 50.400 | 25.400 | 18.400 | 14.200 |
| 16 | 26.600 | 17.600 | 8.700 | 16.300 | 23.600 | 20.000 | 22.800 | 30.100 | 59.900 | 40.000 | 19.000 | 13.600 |
| 17 | 25.000 | 17.400 | 9.700 | 15.800 | 24.000 | 19.800 | 22.500 | 29.300 | 57.800 | 47.900 | 17.600 | 13.100 |
| 18 | 24.600 | 17.100 | 10.500 | 15.400 | 25.700 | 20.600 | 22.300 | 27.100 | 56.500 | 51.800 | 16.300 | 13.600 |
| 19 | 22.700 | 16.500 | 10.700 | 15.300 | 29.700 | 21.300 | 21.800 | 25.500 | 62.300 | 46.200 | 15.100 | 14.000 |
| 20 | 19.000 | 16.400 | 11.200 | 15.300 | 34.000 | 21.200 | 19.800 | 24.600 | 71.400 | 49.600 | 14.300 | 13.900 |
| 21 | 17.500 | 16.600 | 11.800 | 15.100 | 30.000 | 22.400 | 18.300 | 23.500 | 69.400 | 43.200 | 13.200 | 13.400 |
| 22 | 17.300 | 15.400 | 12.300 | 15.300 | 23.400 | 25.500 | 17.600 | 23.300 | 63.800 | 38.900 | 12.600 | 13.100 |
| 23 | 17.500 | 14.900 | 12.000 | 15.600 | 18.400 | 34.000 | 17.800 | 23.600 | 60.500 | 36.000 | 12.200 | 12.800 |
| 24 | 17.300 | 15.000 | 12.900 | 15.800 | 16.200 | 42.000 | 19.000 | 27.500 | 59.100 | 33.400 | 11.900 | 12.600 |
| 25 | 17.200 | 16.000 | 14.700 | 15.900 | 15.200 | 44.000 | 22.900 | 27.700 | 57.300 | 30.800 | 11.700 | 12.300 |
| 26 | 17.100 | 18.000 | 15.900 | 16.100 | 14.900 | 43.000 | 24.000 | 26.300 | 56.400 | 28.600 | 11.700 | 12.600 |
| 27 | 17.200 | 19.000 | 16.600 | 16.300 | 14.600 | 42.000 | 22.300 | 34.900 | 57.200 | 26.800 | 12.200 | 13.200 |
| 28 | 17.000 | 16.000 | 16.600 | 16.600 | 14.500 | 41.000 | 21.500 | 37.500 | 57.800 | 25.600 | 12.700 | 13.600 |
| 29 | 16.400 | 12.000 | 17.300 | 16.700 |  | 40.000 | 22.400 | 36.400 | 59.500 | 23.900 | 13.200 | 13.500 |
| 30 | 16.600 | 13.000 | 17.400 | 16.700 |  | 39.000 | 24.800 | 39.800 | 60.700 | 22.600 | 13.000 | 13.400 |
| 31 | 17.600 |  | 17.300 | 16.900 |  | 37.000 |  | 39.000 |  | 23.100 | 12.600 |  |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** PENNSYLVANIA
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** MONONGAHELA RIVER
**STATION LOCATION** MONONGAHELA RIVER AT
PITTSBURGH, PENNSYLVANIA 83

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 24 | 61 | 10 | 31 | 5172 | 193 | 65 | 128 | 3 | 13 | 24 | 8 | 4 | 12 | 0 | 7 | 6 | 1 | 11 |
| 11 | 30 | 61 | 12 | 6 | 3924 | 259 | 106 | 153 | 3 | 22 | 47 | 20 | 8 | 18 | 1 | 11 | 5 | 2 | 16 |
| 1 | 11 | 62 | 1 | 12 | 710 | * | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 10 | 62 | 5 | 22 | 2015 | * | 174 | * | 7 | 47 | 63 | 21 | 8 | 30 | 4 | 17 | 17 | 4 | 19 |
| 7 | 19 | 62 | 7 | 26 | 3027 | 232 | 124 | 108 | 1 | 19 | 71 | 23 | 10 | 29 | 9 | 22 | 5 | 1 | 5 |
| 8 | 10 | 62 | 8 | 24 | 1078 | 318 | 135 | 183 | 1 | 27 | 72 | 28 | 7 | 29 | 8 | 15 | 7 | 1 | 12 |

* LOW FLOW - NOT PROCESSED

* NOT REPORTED - OVERHEATED

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** PENNSYLVANIA
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** MONONGAHELA RIVER
**STATION LOCATION** MONONGAHELA RIVER AT
PITTSBURGH, PENNSYLVANIA 83

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 3 | 61 | 10 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 8 | 18 | 10 | 20 | 13 | | | | | | |
| 10 | 10 | 61 | 10 | 25 | 0 | 1 | 1 | 2 | 1 | 2 | 5 | 9 | 2 | 10 | 7 | 13 | | | | | | |
| 10 | 17 | 61 | 10 | 31 | 0 | 1 | 0 | 2 | 0 | 2 | 15 | 8 | 28 | 12 | 43 | 14 | | | | | | |
| 10 | 25 | 61 | 11 | 3 | 0 | 1 | 1 | 2 | 1 | 2 | 3 | 8 | 16 | 10 | 19 | 13 | | | | | | |
| 10 | 31 | 61 | 11 | 10 | 0 | 1 | 1 | 2 | 1 | 2 | 2 | 8 | 12 | 10 | 14 | 13 | | | | | | |
| 11 | 8 | 61 | 11 | 21 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 8 | 27 | 10 | 29 | 13 | | | | | | |
| 11 | 15 | 61 | 11 | 28 | 0 | 1 | 1 | 2 | 1 | 2 | 5 | 8 | 23 | 9 | 28 | 12 | | | | | | |
| 11 | 21 | 61 | 12 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 5 | 21 | 7 | 21 | 9 | | | | | | |
| 11 | 28 | 61 | 12 | 5 | 1 | 1 | 0 | 1 | 1 | 1 | 13 | 5 | 17 | 5 | 30 | 7 | | | | | | |
| 12 | 5 | 61 | 12 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 5 | 17 | 7 | 21 | 9 | | | | | | |
| 12 | 14 | 61 | 12 | 21 | 0 | 1 | 1 | 1 | 1 | 1 | 6 | 4 | 17 | 5 | 23 | 6 | | | | | | |
| 12 | 19 | 61 | 1 | 3 | 4 | 2 | 0 | 1 | 4 | 2 | 27 | 7 | 11 | 5 | 38 | 9 | | | | | | |
| 1 | 3 | 62 | 1 | 15 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 4 | 11 | 6 | 16 | 7 | | | | | | |
| 1 | 22 | 62 | 2 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 4 | 33 | 6 | 39 | 7 | | | | | | |
| 2 | 13 | 62 | 2 | 23 | 0 | 1 | 0 | 1 | 0 | 7 | 0 | 6 | 15 | 6 | 15 | 8 | | | | | | |
| 2 | 19 | 62 | 3 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 5 | 16 | 7 | 16 | 9 | | | | | | |
| 2 | 27 | 62 | 3 | 13 | 0 | 1 | 0 | 1 | 0 | 1 | 28 | 8 | 21 | 7 | 49 | 11 | | | | | | |
| 3 | 6 | 62 | 3 | 27 | 3 | 2 | 0 | 1 | 3 | 2 | 33 | 7 | 11 | 6 | 44 | 9 | | | | | | |
| 3 | 12 | 62 | 3 | 29 | 2 | 3 | 0 | 1 | 2 | 3 | 36 | 7 | 16 | 6 | 52 | 9 | | | | | | |
| 3 | 20 | 62 | 4 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 4 | 15 | 5 | 22 | 6 | | | | | | |
| 3 | 27 | 62 | 4 | 10 | 4 | 3 | 1 | 1 | 5 | 3 | 31 | 8 | 13 | 5 | 44 | 9 | | | | | | |
| 4 | 3 | 62 | 4 | 13 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 4 | 15 | 6 | 18 | 7 | | | | | | |
| 4 | 11 | 62 | 4 | 27 | 1 | 1 | 0 | 1 | 1 | 1 | 8 | 5 | 16 | 6 | 24 | 7 | | | | | | |
| 4 | 17 | 62 | 5 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 13 | 8 | 7 | 8 | 15 | | | | | | |
| 4 | 24 | 62 | 5 | 25 | 2 | 1 | 0 | 1 | 2 | 1 | 30 | 8 | 15 | 7 | 45 | 11 | | | | | | |
| 5 | 1 | 62 | 6 | 25 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 4 | 19 | 7 | 19 | 8 | | | | | | |
| 5 | 7 | 62 | 6 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 5 | 21 | 8 | 24 | 9 | | | | | | |
| 5 | 15 | 62 | 6 | 22 | 0 | 0 | 0 | 2 | 0 | 2 | 6 | 7 | 15 | 10 | 21 | 12 | | | | | | |
| 5 | 22 | 62 | 6 | 28 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 14 | 14 | 12 | 14 | 18 | | | | | | |
| 5 | 29 | 62 | 7 | 2 | 0 | 1 | 0 | 2 | 0 | 2 | 4 | 11 | 41 | 15 | 45 | 19 | | | | | | |
| 6 | 6 | 62 | 7 | 6 | 0 | 1 | 2 | 3 | 2 | 3 | 2 | 9 | 44 | 13 | 46 | 16 | | | | | | |
| 6 | 25 | 62 | 8 | 14 | 0 | 1 | 0 | 2 | 0 | 2 | 7 | 11 | 34 | 15 | 41 | 19 | | | | | | |
| 7 | 3 | 62 | 8 | 7 | - | - | - | - | - | - | 1 | 12 | 26 | 18 | 27 | 22 | | | | | | |
| 7 | 10 | 62 | 8 | 13 | - | - | - | - | - | - | 2 | 3 | 13 | 5 | 15 | 6 | | | | | | |
| 7 | 17 | 62 | 8 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 5 | 15 | 8 | 19 | 9 | | | | | | |
| 7 | 24 | 62 | 8 | 9 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 11 | 31 | 14 | 33 | 18 | | | | | | |
| 7 | 31 | 62 | 8 | 15 | - | - | - | - | - | - | 0 | 10 | 37 | 16 | 37 | 19 | | | | | | |
| 8 | 7 | 62 | 8 | 29 | - | - | - | - | - | - | 0 | 9 | 12 | 13 | 12 | 16 | | | | | | |
| 8 | 14 | 62 | 8 | 31 | - | - | - | - | - | - | 0 | 16 | 36 | 15 | 36 | 22 | | | | | | |
| 8 | 21 | 62 | 9 | 30 | - | - | - | - | - | - | 23 | 11 | 13 | 14 | 36 | 18 | | | | | | |
| 8 | 28 | 62 | 10 | 24 | - | - | - | - | - | - | 2 | 10 | 17 | 14 | 19 | 17 | | | | | | |

**STATION LOCATION** MONONGAHELA RIVER AT
PITTSBURGH, PENNSYLVANIA 83

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 9 | 5 | 62 | 10 | 2 | – | – | – | – | – | – | 4 | 11 | 21 | 15 | 25 | 19 | | | | | | |
| 9 | 11 | 62 | 10 | 8 | – | – | – | – | – | – | 2 | 12 | 55 | 19 | 57 | 22 | | | | | | |
| 9 | 19 | 62 | 10 | 10 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 5 | 22 | 8 | 27 | 9 | | | | | | |
| 9 | 25 | 62 | 10 | 22 | – | – | – | – | – | – | 0 | 5 | 26 | 9 | 26 | 10 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** PENNSYLVANIA
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** MONONGAHELA RIVER
**STATION LOCATION** MONONGAHELA RIVER AT
PITTSBURGH, PENNSYLVANIA 83

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 3 | 61 | 700 | 0 | 0 | 540 | 0 | 0 | 0 | 100 | 80 | 0 | 60 | 28 | 2 | | | | | | | | | | | | | | | | | | |
| 10 | 17 | 61 | 3500 | 0 | 0 | 3110 | 0 | 370 | 0 | 0 | 40 | 0 | 0 | 28 | 5 | 51 | 2 | | | | | | | | | | | | | | | | |
| 11 | 8 | 61 | 1000 | 0 | 0 | 0 | 0 | 440 | 580 | 0 | 20 | 0 | 60 | 63 | 2 | 51 | 2 | | | | | | | | | | | | | | | | |
| 11 | 21 | 61 | 3100 | 0 | 0 | 20 | 0 | 2990 | 0 | 20 | 70 | 20 | 70 | 51 | 1 | | | | | | | | | | | | | | | | | | |
| 12 | 5 | 61 | 00 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 19 | 61 | 1000 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 990 | 0 | 190 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 3 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 00 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 200 | 0 | 0 | 0 | 20 | 20 | 0 | 20 | 90 | 0 | 50 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 100 | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 40 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 600 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 540 | 0 | 100 | 87 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 3 | 20 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 0 | 150 | | | | | | | | | | | | | | | | | | | | |
| 4 | 7 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 4 | 17 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 130 | 20 | 110 | | | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 4100 | 0 | 0 | 3910 | 0 | 0 | 0 | 0 | 190 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 5 | 22 | 62 | 300 | 200 | 0 | 0 | 0 | 40 | 0 | 50 | 70 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 6 | 6 | 62 | 100 | 20 | 20 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 6 | 25 | 62 | 2200 | 0 | 0 | 680 | 40 | 390 | 0 | 190 | 930 | 20 | 20 | 28 | 2 | 44 | 2 | 57 | 1 | 88 | 1 | | | | | | | | | | | | |
| 7 | 3 | 62 | 1200 | 0 | 20 | 850 | 0 | 210 | 0 | 0 | 100 | 0 | 0 | 28 | 3 | | | | | | | | | | | | | | | | | | |
| 7 | 17 | 62 | 2900 | 0 | 0 | 0 | 0 | 1650 | 40 | 170 | 1060 | 80 | 40 | 51 | 4 | | | | | | | | | | | | | | | | | | |
| 7 | 31 | 62 | 4500 | 0 | 0 | 3060 | 40 | 340 | 1060 | 0 | 20 | 0 | 40 | 28 | 5 | 63 | 3 | 51 | 2 | 62 | 1 | | | | | | | | | | | | |
| 8 | 21 | 62 | 2800 | 20 | 20 | 2420 | 0 | 190 | 0 | 20 | 80 | 0 | 0 | 28 | 4 | 51 | 1 | | | | | | | | | | | | | | | | |
| 9 | 5 | 62 | 100 | 0 | 0 | 70 | 0 | 0 | 0 | 0 | 10 | 20 | 20 | | | | | | | | | | | | | | | | | | | | |
| 9 | 19 | 62 | 3400 | 20 | 0 | 2900 | 0 | 410 | 0 | 20 | 0 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 3 | 61 | 82 | 29 | 46 | 11 | 26 | 6 | 70 | 6 | 48 | 0 | 0 | 24 | 2 | 2 | 15 | 1 | | | | | | | 5 | 50 | 1 | | | | | 0 | 0 |
| 10 | 17 | 61 | | | | | | | | | | 0 | 0 | 88 | 2 | 5 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 8 | 61 | | | | | | | | | | 0 | 0 | 15 | 2 | 2 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 21 | 61 | | | | | | | | | | 160 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 5 | 61 | | | | | | | | | | 70 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 19 | 61 | 92 | 15 | 62 | 11 | 31 | 9 | 65 | 6 | 59 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 3 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | | | | | | | | | | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 58 | 16 | 83 | 13 | 80 | 11 | 46 | 8 | 52 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 92 | 16 | 71 | 14 | 65 | 8 | 66 | 6 | 56 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 20 | 62 | 92 | 10 | 86 | 10 | 64 | 6 | 63 | 5 | 69 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 7 | 62 | 47 | 28 | 92 | 8 | 51 | 6 | 50 | 5 | 53 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 4 | 17 | 62 | 65 | 12 | 71 | 9 | 52 | 8 | 92 | 7 | 64 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 22 | 62 | | | | | | | | | | 0 | 0 | 84 | 2 | 5 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 6 | 62 | | | | | | | | | | 0 | 0 | 51 | 2 | 4 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 25 | 62 | 65 | 12 | 71 | 10 | 43 | 10 | 92 | 6 | 62 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 3 | 62 | | | | | | | | | | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 17 | 62 | | | | | | | | | | 0 | 0 | 366 | 2 | 7 | | | | | | | | | 14 | 50 | 3 | | | | | 2 | 0 |
| 7 | 31 | 62 | | | | | | | | | | 0 | 0 | 1210 | 2 | 8 | 15 | 2 | | | | | | | 8 | 50 | 2 | | | | | 0 | 0 |
| 8 | 21 | 62 | 43 | 14 | 71 | 12 | 64 | 5 | 26 | 5 | 64 | 0 | 0 | 8 | 15 | 1 | | | | | | | | | 54 | 50 | 5 | 76 | 2 | 51 | 1 | 0 | 0 |
| 9 | 5 | 62 | 71 | 13 | 43 | 11 | 64 | 11 | 92 | 5 | 60 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 19 | 62 | 43 | 27 | 70 | 11 | 2 | 8 | 74 | 8 | 46 | 0 | 0 | 72 | 15 | 3 | 2 | 3 | | | | | | | 25 | 76 | 3 | 50 | 2 | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** PENNSYLVANIA
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** MONONGAHELA RIVER
**STATION LOCATION** MONONGAHELA RIVER AT
PITTSBURGH, PENNSYLVANIA 83

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 21.0 | - | 4.8 | - | - | - | - | - | 10 | 2 | 128 | - | 25 | 233 | - | 392 | - |
| 10 | 10 | 61 | 21.6 | - | 4.2 | - | - | - | - | - | 9 | | 118 | - | 25 | 222 | - | 380 | - |
| 10 | 17 | 61 | 20.0 | - | 4.3 | - | - | - | - | - | 11 | | 130 | - | 25 | 233 | - | 410 | - |
| 10 | 24 | 61 | 20.0 | - | 4.1 | - | - | - | - | - | 12 | 2 | 128 | - | 25 | 244 | - | - | - |
| 10 | 31 | 61 | 19.8 | - | 4.2 | - | - | - | - | - | 12 | | 128 | - | 25 | 222 | - | 207 | - |
| 11 | 8 | 61 | 9.5 | - | 4.5 | - | - | - | - | - | 9 | 1 | 118 | - | 25 | 206 | - | - | - |
| 11 | 14 | 61 | 16.7 | - | 4.5 | - | - | - | - | - | 10 | 2 | 90 | - | 25 | 150 | - | 262 | - |
| 11 | 21 | 61 | 12.5 | - | 6.8 | - | - | - | - | - | 14 | | 90 | - | 25 | 149 | - | 259 | - |
| 11 | 28 | 61 | 12.5 | - | 6.9 | - | - | - | - | - | 10 | 9 | 82 | - | 25 | 94 | - | 163 | - |
| 12 | 5 | 61 | 10.0 | - | 6.3 | - | - | - | - | - | 10 | 7 | 68 | - | 25 | 108 | - | 196 | - |
| 12 | 12 | 61 | 8.0 | - | 6.2 | - | - | - | - | - | 5 | 3 | 70 | - | 25 | 109 | - | 107 | - |
| 12 | 19 | 61 | 10.5 | - | 6.5 | - | - | - | - | - | 3 | 7 | 43 | - | 210 | 72 | - | - | - |
| 1 | 2 | 62 | 8.0 | - | 6.4 | - | - | - | - | - | 5 | 4 | 74 | - | 25 | 112 | - | - | - |
| 1 | 9 | 62 | 8.0 | - | 6.2 | - | - | - | - | - | - | 3 | 62 | - | 170 | - | - | - | - |
| 1 | 15 | 62 | 7.5 | - | 6.7 | - | - | - | - | - | 8 | 6 | 56 | - | 25 | 79 | - | 98 | - |
| 1 | 23 | 62 | 7.0 | - | 6.6 | - | - | - | - | - | - | 4 | 78 | - | 25 | 87 | - | 147 | - |
| 2 | 5 | 62 | 9.2 | - | 6.4 | - | - | - | - | - | 6 | 5 | 80 | - | 50 | 101 | - | 170 | - |
| 2 | 13 | 62 | 6.8 | - | 6.7 | - | - | - | - | - | 6 | 3 | 74 | - | 0 | - | - | 124 | - |
| 2 | 19 | 62 | 10.5 | - | 6.4 | - | - | - | - | - | 7 | 2 | 88 | - | 25 | 114 | - | 219 | - |
| 2 | 28 | 62 | 14.4 | - | 6.5 | - | - | - | - | - | 9 | 7 | 64 | - | 150 | 84 | - | 178 | - |
| 3 | 5 | 62 | 12.0 | - | 6.1 | - | - | - | - | - | 6 | 5 | 66 | - | 80 | 94 | - | 163 | - |
| 3 | 13 | 62 | 10.2 | - | 6.2 | - | - | - | - | - | 5 | 5 | 88 | - | 190 | 128 | - | 221 | - |
| 3 | 20 | 62 | 10.0 | - | 6.2 | - | - | - | - | - | 4 | 4 | 62 | - | 56 | 94 | - | 174 | - |
| 3 | 27 | 62 | 11.0 | - | 6.5 | - | - | - | - | - | 3 | 4 | 52 | - | 110 | 65 | - | 116 | - |
| 4 | 3 | 62 | 11.2 | - | 6.9 | - | - | - | - | - | 4 | 12 | 70 | - | 35 | 66 | - | 164 | - |
| 4 | 9 | 62 | 13.2 | - | 6.3 | - | - | - | - | - | 3 | 7 | 104 | - | 120 | 90 | - | 189 | - |
| 4 | 17 | 62 | 13.8 | - | 6.2 | - | - | - | - | - | 6 | 5 | 80 | - | 110 | 124 | - | 173 | - |
| 4 | 24 | 62 | 14.4 | - | 5.6 | - | - | - | - | - | 8 | 3 | 96 | 0. | 65 | 125 | - | 210 | - |
| 5 | 1 | 62 | 19.3 | - | 5.9 | - | - | - | - | - | 6 | 3 | 92 | 0 | 35 | 153 | - | 211 | - |
| 5 | 8 | 62 | 18.5 | - | 5.8 | - | - | - | - | - | 8 | 4 | 120 | 1 | 13 | 190 | - | 283 | - |
| 5 | 15 | 62 | 19.7 | - | 5.2 | - | - | - | - | - | 9 | 3 | 104 | 0 | 11 | 191 | - | 317 | - |
| 5 | 22 | 62 | 25.0 | - | 5.3 | - | - | - | - | - | 4 | 3 | 122 | 2 | 13 | 223 | - | 386 | - |
| 5 | 29 | 62 | 24.0 | - | 4.8 | - | - | - | - | - | 10 | | 124 | 5 | 15 | 239 | - | 422 | - |
| 6 | 26 | 62 | 25.8 | - | 4.5 | - | - | - | - | - | 7 | 2 | 114 | 2 | 14 | 239 | - | - | - |
| 7 | 3 | 62 | 25.1 | - | 7.0 | - | - | - | - | .5 | 9 | 16 | 142 | 4 | 25 | 219 | - | - | - |
| 7 | 10 | 62 | 25.1 | - | 6.8 | - | - | - | - | .2 | 11 | 8 | 112 | 2 | 17 | 164 | - | 311 | - |
| 7 | 17 | 62 | 26.2 | - | 6.0 | - | - | - | - | .5 | 10 | 3 | 112 | 2 | 11 | 189 | - | 286 | - |
| 7 | 24 | 62 | 25.2 | - | 5.4 | - | - | - | - | .4 | 7 | 2 | 118 | 2 | 12 | 198 | - | 351 | - |
| 7 | 31 | 62 | 26.3 | - | 4.7 | - | - | - | - | .4 | 11 | 1 | 114 | 1 | 15 | 225 | - | 371 | - |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 8 | 7 | 62 | 27.6 | - | 5.0 | - | - | - | - | .3 | 10 | | 122 | 5 | 8 | 240 | - | 318 | - |
| 8 | 14 | 62 | 24.8 | - | 4.8 | - | - | - | - | .2 | 10 | | 136 | 0 | 14 | 224 | - | 391 | - |
| 8 | 21 | 62 | 26.2 | - | 4.9 | - | - | - | - | .3 | 9 | 2 | 123 | 2 | 11 | 197 | - | 396 | - |
| 8 | 27 | 62 | 27.0 | - | 5.1 | - | - | - | - | .4 | - | 2 | 142 | 0 | 10 | 262 | - | 454 | - |
| 9 | 5 | 62 | 25.0 | - | 6.4 | - | - | - | - | .6 | 13 | 11 | 138 | 2 | 30 | 220 | - | 367 | - |
| 9 | 11 | 62 | 24.0 | - | 5.9 | - | - | - | - | .6 | 16 | 3 | 173 | 0 | 11 | 269 | - | 497 | - |
| 9 | 18 | 62 | 22.0 | - | 5.7 | - | - | - | - | - | - | 1 | 192 | 2 | 10 | - | - | - | - |
| 9 | 25 | 62 | 21.4 | - | 5.6 | - | - | - | - | - | 13 | 1 | 190 | 5 | 12 | 310 | - | 493 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Braddock, Pennsylvania
Operated by U.S. Geological Survey

|  |  |
|---|---|
| STATE | Pennsylvania |
| MAJOR BASIN | Ohio River |
| MINOR BASIN | Monongahela River |
| STATION LOCATION | Monongahela River at<br>Pittsburgh, Pennsylvania |

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.180 | 4.400 | 10.500 | 8.100 | 15.600 | 64.500 | 28.200 | 7.800 | 4.240 | 1.980 | 1.940 | 1.800 |
| 2 | 2.240 | 6.550 | 8.100 | 7.050 | 13.500 | 44.000 | 21.600 | 10.200 | 4.240 | 1.740 | 1.940 | 5.490 |
| 3 | 2.860 | 7.300 | 6.800 | 7.550 | 12.400 | 37.400 | 18.000 | 8.700 | 3.200 | 2.960 | 1.800 | 3.400 |
| 4 | 3.640 | 6.800 | 5.400 | 6.550 | 12.800 | 35.200 | 15.600 | 7.550 | 2.680 | 3.800 | 1.800 | 2.960 |
| 5 | 4.550 | 5.200 | 6.000 | 7.550 | 16.600 | 28.600 | 12.800 | 5.900 | 4.520 | 3.560 | 1.940 | 3.700 |
| 6 | 5.000 | 4.950 | 6.100 | 9.900 | 22.400 | 23.200 | 12.400 | 4.920 | 11.400 | 3.140 | 2.330 | 3.280 |
| 7 | 4.400 | 6.800 | 5.250 | 35.800 | 20.000 | 20.000 | 23.800 | 4.480 | 11.100 | 3.060 | 2.220 | 2.780 |
| 8 | 3.080 | 7.050 | 4.650 | 54.300 | 18.000 | 19.200 | 52.100 | 4.920 | 7.550 | 2.680 | 2.380 | 2.300 |
| 9 | 2.680 | 7.050 | 3.900 | 31.300 | 16.300 | 18.800 | 40.700 | 5.520 | 5.760 | 2.330 | 2.820 | 2.080 |
| 10 | 2.940 | 6.550 | 3.600 | 27.700 | 14.900 | 16.000 | 29.500 | 5.440 | 3.450 | 2.220 | 2.890 | 2.020 |
| 11 | 2.810 | 5.650 | 4.970 | 25.000 | 10.200 | 16.300 | 25.000 | 5.480 | 2.610 | 2.160 | 2.500 | 2.440 |
| 12 | 2.680 | 5.500 | 10.400 | 20.800 | 8.400 | 36.200 | 25.000 | 5.000 | 4.450 | 2.120 | 2.300 | 2.330 |
| 13 | 2.680 | 4.500 | 15.600 | 16.000 | 10.500 | 49.700 | 50.200 | 4.280 | 11.400 | 1.980 | 2.220 | 1.940 |
| 14 | 3.400 | 5.100 | 17.400 | 11.400 | 11.400 | 38.500 | 52.100 | 3.880 | 12.400 | 2.190 | 2.680 | 1.770 |
| 15 | 4.750 | 6.300 | 18.800 | 8.100 | 10.800 | 36.300 | 40.700 | 4.640 | 11.100 | 2.300 | 2.640 | 1.700 |
| 16 | 4.950 | 7.050 | 17.400 | 12.800 | 10.200 | 31.300 | 35.200 | 4.680 | 9.600 | 2.640 | 2.440 | 1.630 |
| 17 | 4.950 | 9.000 | 18.000 | 12.100 | 10.500 | 28.600 | 30.400 | 4.680 | 6.550 | 3.700 | 2.300 | 1.600 |
| 18 | 4.400 | 11.400 | 23.600 | 10.500 | 9.600 | 20.000 | 25.900 | 4.640 | 5.900 | 4.520 | 2.190 | 1.630 |
| 19 | 3.900 | 8.400 | 39.600 | 10.800 | 9.300 | 14.900 | 24.100 | 4.600 | 6.250 | 4.080 | 1.940 | 1.600 |
| 20 | 3.560 | 6.550 | 37.400 | 11.400 | 13.500 | 16.600 | 23.200 | 3.620 | 6.150 | 3.480 | 1.770 | 1.660 |
| 21 | 3.600 | 6.550 | 32.200 | 8.700 | 16.300 | 23.200 | 23.200 | 3.060 | 7.800 | 3.200 | 2.080 | 1.700 |
| 22 | 6.280 | 6.550 | 30.400 | 11.800 | 14.900 | 58.800 | 21.600 | 3.340 | 7.050 | 2.440 | 2.300 | 1.630 |
| 23 | 4.400 | 6.100 | 26.800 | 29.800 | 16.600 | 71.000 | 19.200 | 3.200 | 5.160 | 2.440 | 1.980 | 1.600 |
| 24 | 4.900 | 20.600 | 22.400 | 36.300 | 42.000 | 47.300 | 19.600 | 3.420 | 4.120 | 2.750 | 1.740 | 1.560 |
| 25 | 5.000 | 38.500 | 19.200 | 30.400 | 48.500 | 44.000 | 18.400 | 3.840 | 3.840 | 3.420 | 1.600 | 2.050 |
| 26 | 4.900 | 25.900 | 15.200 | 27.700 | 35.200 | 45.100 | 16.000 | 4.520 | 3.520 | 3.380 | 1.630 | 2.020 |
| 27 | 4.500 | 20.000 | 11.400 | 28.600 | 49.400 | 32.200 | 13.200 | 4.480 | 2.890 | 3.000 | 1.630 | 2.050 |
| 28 | 4.150 | 16.300 | 12.800 | 25.000 | 65.800 | 25.000 | 9.600 | 4.130 | 2.680 | 2.720 | 1.460 | 4.440 |
| 29 | 3.760 | 13.800 | 12.800 | 20.800 |  | 17.000 | 7.550 | 6.250 | 2.500 | 2.360 | 1.600 | 5.160 |
| 30 | 3.640 | 12.400 | 12.100 | 20.000 |  | 14.200 | 6.300 | 6.300 | 2.470 | 1.940 | 1.600 | 5.200 |
| 31 | 4.050 |  | 10.800 | 17.700 |  | 15.200 |  | 4.000 |  | 1.980 | 1.600 |  |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 2 | 61 | 10 | 12 | 2634 | 217 | 20 | 197 | 1 | 3 | 11 | 2 | 1 | 8 | 0 | 3 | 0 | 0 | 2 |
| 11 | 9 | 61 | 11 | 15 | 1360 | 388 | 70 | 318 | 4 | 6 | 34 | 10 | 5 | 15 | 4 | 13 | 2 | 1 | 10 |
| 12 | 4 | 61 | 12 | 9 | 1424 | 535 | 122 | 413 | 4 | 11 | 43 | 13 | 5 | 24 | 1 | 54 | 5 | 1 | 4 |
| 2 | 6 | 62 | 2 | 14 | 3570# | 139 | 19 | 120 | 0 | 4 | 10 | 2 | 1 | 7 | 0 | 2 | 1 | 0 | 2 |
| 3 | 5 | 62 | 3 | 8 | 1125 | 289 | 42 | 247 | 0 | 6 | 24 | 9 | 4 | 11 | 0 | 3 | 2 | 1 | 6 |
| 3 | 8 | 62 | 3 | 17 | 3849 | 144 | 24 | 120 | 0 | 5 | 11 | 3 | 1 | 7 | 0 | 2 | 1 | 1 | 4 |
| 4 | 2 | 62 | 4 | 9 | 3683 | 143 | 38 | 105 | 1 | 11 | 13 | 2 | 1 | 9 | 1 | 4 | 3 | 1 | 5 |
| 5 | 7 | 62 | 5 | 14 | 4314 | 162 | 58 | 104 | 1 | 19 | 14 | 2 | 1 | 11 | 0 | 6 | 4 | 1 | 13 |
| 6 | 4 | 62 | 6 | 12 | 4334 | 100 | 35 | 65 | 1 | 10 | 10 | 1 | 1 | 8 | 0 | 4 | 2 | 0 | 8 |
| 7 | 2 | 62 | 7 | 9 | 4219 | 118 | 28 | 90 | 0 | 5 | 8 | 2 | 0 | 6 | 0 | 3 | 1 | 1 | 10 |
| 8 | 6 | 62 | 8 | 14 | 4631 | 128 | 55 | 73 | 2 | 17 | 13 | 2 | 1 | 10 | 0 | 6 | 5 | 1 | 11 |
| 9 | 3 | 62 | 9 | 10 | 4200 | 127 | 30 | 97 | 1 | 10 | 8 | 1 | 0 | 7 | 0 | 3 | 2 | 0 | 6 |

# ESTIMATED

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** NEBRASKA
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** NORTH PLATTE RIVER
**STATION LOCATION** NORTH PLATTE RIVER ABOVE
HENRY, NEBRASKA 94

| DATE SAMPLE TAKEN MO. | DATE SAMPLE TAKEN DAY | DATE SAMPLE TAKEN YR. | RADIOACTIVITY IN WATER: DATE OF DETERMINATION MO. | DATE OF DETERMINATION DAY | ALPHA SUSPENDED µµc/l | ± | ALPHA DISSOLVED µµc/l | ± | ALPHA TOTAL µµc/l | ± | BETA SUSPENDED µµc/l | ± | BETA DISSOLVED µµc/l | ± | BETA TOTAL µµc/l | ± | RADIOACTIVITY IN PLANKTON: DATE OF DETERMINATION MO. | DATE OF DETERMINATION DAY | GROSS ACTIVITY ALPHA µµc/g | ± | GROSS ACTIVITY BETA µµc/g | ± |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 2 | 61 | 10 | 14 | 0 | 1 | 23 | 7 | 23 | 7 | 10 | 8 | 43 | 14 | 53 | 16 | | | | | | |
| 10 | 9 | 61 | 11 | 8 | 0 | 1 | 34 | 8 | 34 | 8 | 15 | 8 | 56 | 13 | 71 | 15 | | | | | | |
| 10 | 16 | 61 | 10 | 30 | 0 | 1 | 26 | 7 | 26 | 7 | 6 | 8 | 41 | 12 | 47 | 14 | | | | | | |
| 10 | 23 | 61 | 11 | 14 | 1 | 2 | 21 | 6 | 22 | 6 | 0 | 15 | 49 | 20 | 49 | 25 | | | | | | |
| 10 | 30 | 61 | 11 | 7 | 0 | 2 | 12 | 5 | 12 | 5 | 16 | 16 | 81 | 21 | 97 | 26 | | | | | | |
| 11 | 6 | 61 | 11 | 17 | 0 | 1 | 18 | 5 | 18 | 5 | 61 | 7 | 105 | 14 | 166 | 16 | | | | | | |
| 11 | 13 | 61 | 11 | 28 | 0 | 1 | 28 | 8 | 28 | 8 | 19 | 9 | 55 | 13 | 74 | 16 | | | | | | |
| 11 | 20 | 61 | 12 | 7 | 0 | 1 | 37 | 8 | 37 | 8 | 10 | 8 | 60 | 13 | 70 | 15 | | | | | | |
| 11 | 27 | 61 | 12 | 5 | 2 | 1 | 31 | 8 | 33 | 8 | 23 | 8 | 76 | 13 | 99 | 15 | | | | | | |
| 12 | 4 | 61 | 12 | 18 | 0 | 1 | 32 | 8 | 32 | 8 | 14 | 8 | 57 | 13 | 71 | 15 | | | | | | |
| 12 | 11 | 61 | 12 | 20 | 0 | 1 | 32 | 8 | 32 | 8 | 17 | 8 | 52 | 12 | 69 | 14 | | | | | | |
| 12 | 18 | 61 | 1 | 8 | 0 | 1 | 28 | 7 | 28 | 7 | 22 | 8 | 49 | 12 | 71 | 14 | | | | | | |
| 12 | 26 | 61 | 1 | 9 | 0 | 1 | 0 | 2 | 0 | 2 | 5 | 15 | 18 | 20 | 23 | 25 | | | | | | |
| 1 | 2 | 62 | 1 | 18 | 1 | 1 | 42 | 9 | 43 | 9 | 2 | 8 | 44 | 13 | 46 | 15 | | | | | | |
| 1 | 8 | 62 | 1 | 19 | 0 | 2 | 33 | 8 | 33 | 8 | 26 | 17 | 55 | 20 | 81 | 26 | | | | | | |
| 1 | 15 | 62 | 1 | 30 | 0 | 2 | 31 | 8 | 31 | 8 | 12 | 16 | 49 | 20 | 61 | 25 | | | | | | |
| 1 | 21 | 62 | 2 | 6 | 0 | 1 | 14 | 5 | 14 | 5 | 10 | 8 | 47 | 13 | 57 | 15 | | | | | | |
| 1 | 29 | 62 | 2 | 12 | 0 | 1 | 26 | 7 | 26 | 7 | 3 | 8 | 32 | 12 | 35 | 14 | | | | | | |
| 2 | 5 | 62 | 2 | 15 | 0 | 1 | 8 | 3 | 8 | 3 | 16 | 8 | 32 | 9 | 48 | 12 | | | | | | |
| 2 | 12 | 62 | 3 | 5 | 0 | 1 | 43 | 9 | 43 | 9 | 0 | 10 | 69 | 17 | 69 | 20 | | | | | | |
| 2 | 19 | 62 | 2 | 28 | 0 | 1 | 36 | 8 | 36 | 8 | 1 | 7 | 54 | 13 | 55 | 15 | | | | | | |
| 2 | 26 | 62 | 3 | 8 | 0 | 2 | 29 | 8 | 29 | 8 | 9 | 15 | 104 | 21 | 113 | 26 | | | | | | |
| 3 | 5 | 62 | 3 | 19 | 0 | 1 | 29 | 7 | 29 | 7 | 15 | 9 | 48 | 12 | 63 | 15 | | | | | | |
| 3 | 12 | 62 | 3 | 20 | 0 | 1 | 26 | 7 | 26 | 7 | 4 | 11 | 50 | 17 | 54 | 20 | | | | | | |
| 3 | 19 | 62 | 4 | 6 | 1 | 1 | 41 | 8 | 42 | 8 | 22 | 14 | 70 | 20 | 92 | 24 | | | | | | |
| 3 | 26 | 62 | 4 | 4 | 2 | 1 | 37 | 8 | 39 | 8 | 3 | 8 | 50 | 13 | 53 | 15 | | | | | | |
| 4 | 2 | 62 | 4 | 12 | 2 | 1 | 30 | 7 | 32 | 7 | 24 | 9 | 57 | 13 | 81 | 16 | | | | | | |
| 4 | 9 | 62 | 4 | 27 | 0 | 1 | 25 | 6 | 25 | 6 | 17 | 9 | 50 | 12 | 67 | 15 | | | | | | |
| 4 | 16 | 62 | 4 | 27 | 0 | 1 | 39 | 8 | 39 | 8 | 9 | 8 | 44 | 12 | 53 | 14 | | | | | | |
| 4 | 23 | 62 | 5 | 23 | 0 | 1 | 24 | 6 | 24 | 6 | 14 | 11 | 55 | 15 | 69 | 19 | | | | | | |
| 4 | 30 | 62 | 7 | 18 | 1 | 1 | 22 | 6 | 23 | 6 | 7 | 10 | 44 | 15 | 51 | 18 | | | | | | |
| 5 | 7 | 62 | 6 | 11 | 7 | 4 | 18 | 5 | 25 | 6 | 38 | 16 | 49 | 15 | 87 | 22 | | | | | | |
| 5 | 14 | 62 | 6 | 20 | 0 | 1 | 12 | 5 | 12 | 5 | 19 | 16 | 42 | 19 | 61 | 25 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | 2 | 4 | 23 | 6 | 25 | 7 | 50 | 18 | 67 | 16 | 117 | 24 | | | | | | |
| 5 | 27 | 62 | 6 | 28 | 13 | 10 | 29 | 7 | 42 | 12 | 405 | 32 | 91 | 18 | 496 | 37 | | | | | | |
| 6 | 4 | 62 | 7 | 6 | 2 | 2 | 22 | 6 | 24 | 6 | 0 | 31 | 55 | 16 | 55 | 35 | | | | | | |
| 6 | 10 | 62 | 7 | 10 | 2 | 2 | 23 | 6 | 25 | 6 | 52 | 14 | 58 | 16 | 110 | 21 | | | | | | |
| 6 | 18 | 62 | 10 | 6 | 12 | 8 | 1 | 1 | 13 | 8 | 225 | 44 | 13 | 13 | 238 | 46 | | | | | | |
| 6 | 25 | 62 | 7 | 19 | 18 | 15 | 18 | 6 | 36 | 16 | 600 | 83 | 170 | 17 | 770 | 85 | | | | | | |
| 7 | 2 | 62 | 8 | 1 | 10 | 9 | 10 | 4 | 20 | 10 | 231 | 29 | 98 | 18 | 329 | 34 | | | | | | |
| 7 | 9 | 62 | 8 | 13 | 1 | 2 | 13 | 5 | 14 | 5 | 36 | 10 | 101 | 13 | 137 | 16 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** NEBRASKA

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** NORTH PLATTE RIVER

**STATION LOCATION** NORTH PLATTE RIVER ABOVE
HENRY, NEBRASKA 94

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 7 | 13 | 62 | 8 | 6 | 5 | 3 | 20 | 5 | 25 | 6 | 69 | 16 | 72 | 15 | 141 | 22 | | | | | | |
| 7 | 23 | 62 | 8 | 10 | 0 | 1 | 12 | 4 | 12 | 4 | 1 | 11 | 49 | 16 | 50 | 19 | | | | | | |
| 7 | 30 | 62 | 8 | 28 | 1 | 2 | 15 | 5 | 16 | 5 | 41 | 14 | 55 | 15 | 96 | 21 | | | | | | |
| 8 | 6 | 62 | 8 | 23 | 2 | 3 | 4 | 3 | 6 | 4 | 33 | 16 | 39 | 15 | 72 | 22 | | | | | | |
| 8 | 13 | 62 | 8 | 30 | 1 | 2 | 14 | 5 | 15 | 5 | 27 | 14 | 40 | 15 | 67 | 21 | | | | | | |
| 8 | 20 | 62 | 9 | 11 | 0 | 1 | 12 | 5 | 12 | 5 | 18 | 8 | 61 | 12 | 79 | 14 | | | | | | |
| 8 | 27 | 62 | 9 | 14 | 3 | 5 | 5 | 3 | 8 | 6 | 22 | 23 | 44 | 18 | 66 | 29 | | | | | | |
| 9 | 4 | 62 | 9 | 20 | 1 | 1 | 15 | 5 | 16 | 5 | 6 | 11 | 49 | 20 | 55 | 23 | | | | | | |
| 9 | 17 | 62 | 10 | 8 | 1 | 1 | 20 | 6 | 21 | 6 | 12 | 11 | 54 | 15 | 66 | 19 | | | | | | |
| 9 | 24 | 62 | 10 | 16 | 0 | 2 | 27 | 6 | 27 | 6 | 16 | 14 | 50 | 16 | 66 | 21 | | | | | | |

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 1 | 61 | 3700 | 0 | 0 | 0 | 0 | 60 | 0 | 580 | 3080 | 100 | 640 | 82 | 7 | 73 | 2 | 81 | 2 | 75 | 2 | 68 | 2 | 87 | 1 | 79 | 1 | 71 | 1 | 88 | 1 | | |
| 10 | 16 | 61 | 1100 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 920 | 90 | 890 | 82 | 2 | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 1400 | 0 | 20 | 0 | 0 | 20 | 0 | 210 | 1180 | 80 | 460 | 82 | 2 | 88 | 1 | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 420 | 0 | 290 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 1800 | 0 | 0 | 0 | 0 | 0 | 0 | 170 | 1640 | 0 | 350 | 81 | 2 | 82 | 2 | 92 | 1 | 88 | 1 | | | | | | | | | | | | |
| 12 | 18 | 61 | 1100 | 0 | 220 | 0 | 0 | 20 | 0 | 270 | 630 | 1070 | 20 | 68 | 1 | 81 | 1 | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 1900 | 70 | 20 | 0 | 0 | 50 | 0 | 410 | 1330 | 0 | 70 | 81 | 2 | 68 | 2 | 92 | 1 | 82 | 1 | | | | | | | | | | | | |
| 1 | 15 | 62 | 700 | 0 | 0 | 0 | 0 | 0 | 0 | 500 | 250 | 0 | 40 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 2500 | 0 | 0 | 20 | 0 | 20 | 0 | 580 | 1880 | 60 | 370 | 92 | 2 | 82 | 2 | 71 | 1 | 68 | 1 | 88 | 1 | | | | | | | | | | |
| 2 | 19 | 62 | 6100 | 80 | 80 | 40 | 0 | 460 | 0 | 790 | 4680 | 60 | 410 | 92 | 4 | 88 | 4 | 82 | 3 | 81 | 3 | 68 | 2 | 51 | 2 | | | | | | | | |
| 3 | 5 | 62 | 3800 | 0 | 0 | 0 | 20 | 60 | 40 | 500 | 3190 | 80 | 810 | 81 | 3 | 92 | 2 | 88 | 2 | 68 | 2 | 73 | 1 | 75 | 1 | 79 | 1 | | | | | | |
| 3 | 19 | 62 | 1700 | 0 | 0 | 0 | 0 | 0 | 0 | 360 | 1340 | 50 | 1410 | 81 | 2 | 68 | 1 | 88 | 1 | 82 | 1 | | | | | | | | | | | | |
| 4 | 2 | 62 | 9900 | 0 | 0 | 20 | 20 | 40 | 20 | 750 | 9010 | 80 | 1350 | 88 | 5 | 92 | 4 | 82 | 4 | 81 | 3 | 68 | 3 | 78 | 2 | 73 | 1 | 80 | 1 | 91 | 1 | 87 | 1 |
| 4 | 16 | 62 | 4100 | 0 | 0 | 0 | 20 | 40 | 0 | 350 | 3730 | 40 | 700 | 73 | 3 | 75 | 3 | 81 | 2 | 77 | 2 | 87 | 2 | 71 | 1 | 88 | 1 | 82 | 1 | 85 | 1 | | |
| 5 | 7 | 62 | 35400 | 130 | 40 | 250 | 340 | 0 | 40 | 5020 | 29580 | 800 | 27180 | 68 | 6 | 73 | 5 | 81 | 5 | 82 | 5 | 92 | 5 | 75 | 5 | 87 | 5 | 88 | 4 | 85 | 4 | 84 | 3 |
| 5 | 21 | 62 | 4600 | 60 | 0 | 80 | 0 | 20 | 0 | 630 | 3820 | 210 | 2070 | 91 | 3 | 88 | 3 | 71 | 2 | 92 | 2 | 82 | 2 | 87 | 2 | 81 | 2 | 84 | 1 | | | | |
| 6 | 4 | 62 | 4700 | 0 | 0 | 0 | 0 | 450 | 0 | 180 | 4020 | 110 | 2150 | 87 | 3 | 88 | 3 | 57 | 2 | 82 | 2 | 73 | 2 | 84 | 1 | 97 | 1 | 79 | 1 | 81 | 1 | | |
| 6 | 18 | 62 | 29600 | 0 | 0 | 80 | 0 | 0 | 40 | 1770 | 27730 | 800 | 14050 | 82 | 5 | 88 | 5 | 79 | 4 | 92 | 4 | 73 | 4 | 91 | 4 | 87 | 4 | 75 | 4 | 66 | 4 | 97 | 4 |
| 7 | 2 | 62 | 26000 | 0 | 40 | 40 | 0 | 210 | 0 | 410 | 25250 | 250 | 5800 | 88 | 6 | 92 | 6 | 87 | 5 | 84 | 4 | 82 | 4 | 78 | 4 | 91 | 4 | 81 | 3 | 79 | 3 | 80 | 3 |
| 7 | 16 | 62 | 700 | 0 | 0 | 0 | 0 | 40 | 60 | 370 | 250 | 20 | 40 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 9000 | 0 | 0 | 40 | 0 | 0 | 0 | 890 | 8100 | 630 | 4980 | 87 | 3 | 82 | 3 | 88 | 3 | 81 | 3 | 85 | 3 | 92 | 3 | 91 | 3 | 79 | 3 | 71 | 2 | 68 | 1 |
| 8 | 20 | 62 | 3100 | 0 | 0 | 170 | 0 | 60 | 0 | 630 | 2190 | 130 | 680 | 87 | 2 | 71 | 1 | 73 | 1 | 88 | 1 | 68 | 1 | 81 | 1 | | | | | | | | |
| 9 | 4 | 62 | 3100 | 0 | 80 | 170 | 250 | 40 | 0 | 800 | 1770 | 80 | 1390 | 79 | 3 | 71 | 2 | 50 | 1 | 69 | 1 | | | | | | | | | | | | |
| 9 | 17 | 62 | 1100 | 20 | 0 | 60 | 0 | 30 | 0 | 700 | 260 | 230 | 1130 | 71 | 2 | 68 | 1 | 79 | 1 | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | PROTOZOA (Identifiable) Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST GENUS | 1ST COUNT LEVEL | 2ND GENUS | 2ND COUNT LEVEL | 3RD GENUS | 3RD COUNT LEVEL | 4TH GENUS | 4TH COUNT LEVEL | 5TH GENUS | 5TH COUNT LEVEL | | 1ST GENUS | 1ST COUNT LEVEL | 2ND GENUS | 2ND COUNT LEVEL | 3RD GENUS | 3RD COUNT LEVEL | | |
| 10 | 1 | 61 | 36 | 34 | 33 | 12 | 6 | 12 | 2 | 12 | 30 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 36 | 57 | 71 | 8 | 33 | 7 | 92 | 6 | 22 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 36 | 33 | 71 | 18 | 92 | 11 | 33 | 7 | 31 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 36 | 27 | 71 | 11 | 33 | 11 | 92 | 8 | 43 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 12 | 4 | 61 | 33 | 31 | 36 | 20 | 92 | 17 | 71 | 5 | 27 | 40 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 36 | 23 | 32 | 22 | 92 | 13 | 71 | 11 | 31 | 630 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 1 | 2 | 62 | 33 | 26 | 92 | 20 | 36 | 20 | 71 | 9 | 25 | 110 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 3 | 0 |
| 1 | 15 | 62 | 33 | 29 | 2 | 11 | 36 | 10 | 6 | 5 | 45 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 1 |
| 2 | 5 | 62 | 92 | 24 | 33 | 17 | 36 | 16 | 71 | 8 | 33 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 2 | 19 | 62 | 92 | 31 | 71 | 27 | 36 | 12 | 33 | 9 | 21 | 80 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 3 | 1 |
| 3 | 5 | 62 | 92 | 14 | 33 | 13 | 36 | 7 | 71 | 6 | 60 | 150 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 4 | 1 |
| 3 | 19 | 62 | 33 | 20 | 71 | 14 | 36 | 11 | 86 | 9 | 46 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 71 | 23 | 92 | 21 | 36 | 16 | 33 | 10 | 30 | 80 | 0 | 4 | | | | | | | | | | | 2 | | | | | | | 1 | 3 |
| 4 | 16 | 62 | 6 | 17 | 2 | 12 | 33 | 9 | 9 | 8 | 54 | 0 | 0 | 0 | | | | | | | | | | | 2 | | | | | | | 2 | 1 |
| 5 | 7 | 62 | 48 | 15 | 36 | 11 | 6 | 10 | 92 | 10 | 54 | 0 | 0 | 0 | | | | | | | | | | | 9 | 76 | 1 | 50 | 1 | | | 1 | 1 |
| 5 | 21 | 62 | 92 | 13 | 71 | 13 | 88 | 10 | 86 | 9 | 55 | 0 | 0 | 0 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 48 | 22 | 71 | 12 | 65 | 10 | 36 | 7 | 49 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 36 | 15 | 92 | 7 | 16 | 6 | 71 | 5 | 67 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 92 | 23 | 71 | 10 | 65 | 8 | 36 | 6 | 53 | 210 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 7 | 16 | 62 | 36 | 11 | 92 | 10 | 58 | 9 | 16 | 8 | 62 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 36 | 13 | 51 | 9 | 92 | 9 | 33 | 9 | 60 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 58 | 22 | 26 | 8 | 83 | 6 | 6 | 4 | 60 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 15 | 50 | 36 | 14 | 58 | 11 | 83 | 5 | 20 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 16 | 48 | 36 | 13 | 82 | 6 | 26 | 4 | 29 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** NORTH PLATTE RIVER

**STATION LOCATION** NORTH PLATTE RIVER ABOVE
HENRY, NEBRASKA 94

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 10.5 | 7.3 | 8.1 | 1.2 | - | 8.0 | 16.1 | - | 18 | 210 | 250 | 6 | 0 | - | - | - | 3100 |
| 10 | 9 | 61 | 8.5 | 8.5 | 8.1 | 7.4 | - | - | - | - | 21 | 220 | 245 | 12 | 34 | - | - | - | 7000 |
| 10 | 16 | 61 | 12.5 | 7.1 | 8.1 | - | - | - | - | - | 23 | 240 | 235 | 12 | 52 | 260 | - | - | 19000 |
| 10 | 23 | 61 | 6.0 | 9.0 | 8.0 | - | - | - | - | - | 24 | 240 | 270 | 15 | 53 | - | - | 588 | 9500 |
| 10 | 30 | 61 | 4.5 | 9.0 | 8.1 | 38.2 | - | - | - | - | 25 | 246 | 260 | 17 | 52 | 275 | - | 660 | - |
| 11 | 6 | 61 | 4.6 | 9.5 | 8.1 | 33.0 | 67 | - | - | - | 25 | 248 | 250 | 15 | 54 | 275 | 1.1 | 700 | 47000 |
| 11 | 13 | 61 | 4.9 | 8.8 | 8.0 | 34.7 | 82 | - | - | - | 26 | 250 | 285 | 16 | 55 | 198 | .2 | 670 | 46000 |
| 11 | 20 | 61 | 2.0 | 8.8 | 8.0 | 47.0 | 83 | - | - | - | 27 | 230 | 290 | 17 | 43 | 190 | .6 | 650 | 24000 |
| 11 | 27 | 61 | 5.0 | 7.7 | 8.1 | 52.0 | 80 | - | - | - | 28 | 240 | 250 | 15 | 45 | 264 | .0 | 730 | 21000 |
| 12 | 4 | 61 | 4.0 | 8.0 | 8.1 | 37.3 | 87 | - | - | - | 27 | 250 | 260 | 16 | 43 | - | .0 | 700 | 24000 |
| 12 | 11 | 61 | .0 | 9.5 | 8.1 | 44.0 | 121 | - | - | - | 30 | 276 | 280 | 19 | 45 | 250 | .0 | 710 | 22000 |
| 12 | 18 | 61 | 2.0 | 9.4 | 8.0 | 33.5 | 113 | - | - | - | 34 | 250 | 240 | 16 | 47 | - | .0 | 690 | 53000 |
| 12 | 26 | 61 | 4.0 | 7.3 | 8.1 | 59.0 | 81 | - | - | - | 40 | 280 | 250 | 18 | 52 | 300 | .4 | 970 | 93000 |
| 1 | 2 | 62 | 1.5 | 10.0 | 8.1 | 11.6 | 40 | - | - | - | 35 | 248 | 230 | 12 | 15 | 220 | .4 | 650 | 3600 |
| 1 | 8 | 62 | .0 | 11.0 | 8.1 | 2.2 | 43 | - | - | - | 37 | 252 | 240 | 12 | 25 | 260 | .5 | - | 9500 |
| 1 | 15 | 62 | .0 | 9.4 | 8.0 | 3.1 | 30 | - | - | - | 33 | 240 | 250 | 11 | 12 | 290 | .4 | 630 | 5600 |
| 1 | 22 | 62 | .0 | 8.5 | 8.0 | 3.3 | 34 | - | - | - | 31 | 250 | 260 | 12 | 10 | 205 | .4 | 660 | 2700 |
| 1 | 29 | 62 | .0 | 9.8 | 8.0 | 3.6 | 39 | - | - | - | 30 | 220 | 230 | 15 | 10 | 175 | .0 | 580 | 7500 |
| 2 | 5 | 62 | .0 | 11.3 | 8.0 | 1.3 | 14 | - | - | - | 28 | 230 | 250 | 16 | 10 | 175 | .0 | 650 | 3300 |
| 2 | 12 | 62 | - | 9.4 | 8.1 | 2.3 | 25 | - | - | - | 31 | 210 | 230 | 18 | 45 | - | .5 | 650 | 5000 |
| 2 | 19 | 62 | 2.5 | 11.1 | 8.0 | 3.1 | 17 | - | - | - | 29 | 186 | 230 | 20 | 33 | - | .4 | 590 | 2800 |
| 2 | 26 | 62 | .0 | 11.3 | 8.1 | 4.5 | 12 | - | - | - | 31 | 210 | 240 | 13 | 25 | 180 | .4 | 590 | 1000 |
| 3 | 5 | 62 | 1.0 | 11.4 | 8.0 | 2.4 | 6 | - | - | - | 28 | 192 | 256 | 15 | 52 | 200 | .5 | 530 | 920 |
| 3 | 12 | 62 | .0 | 12.2 | 8.0 | 3.1 | 14 | - | - | - | 28 | 192 | 260 | 16 | 55 | 235 | .4 | 610 | 630 |
| 3 | 19 | 62 | 7.0 | 11.1 | 8.0 | 3.6 | 6 | - | - | - | 29 | 200 | 224 | 15 | 85 | 250 | .4 | 580 | *17 |
| 3 | 26 | 62 | 9.0 | 10.8 | 8.0 | 3.4 | 19 | - | - | - | 31 | 184 | 208 | 12 | 85 | 235 | .4 | 690 | 5500 |
| 4 | 2 | 62 | 4.0 | 10.9 | 8.0 | 4.9 | 23 | - | - | - | 28 | 166 | 200 | 23 | 185 | 220 | .4 | 540 | 5300 |
| 4 | 9 | 62 | 7.0 | 11.3 | 8.0 | 2.9 | 19 | - | - | - | 27 | 162 | 208 | 22 | 170 | 215 | .4 | 560 | 690 |
| 4 | 16 | 62 | 9.0 | 10.7 | 8.0 | 4.5 | 14 | - | - | - | 28 | 174 | 224 | 21 | 90 | 245 | .4 | 600 | 3000 |
| 4 | 23 | 62 | 14.5 | 9.2 | 8.3 | 3.3 | 22 | - | - | - | 28 | 158 | 216 | 17 | 110 | 200 | .4 | - | 170 |
| 4 | 30 | 62 | 12.0 | 9.5 | 8.2 | 3.0 | 12 | - | - | - | 28 | 160 | 208 | 25 | 97 | 192 | .4 | - | 3800 |
| 5 | 7 | 62 | 15.0 | 7.0 | 8.0 | 6.8 | 42 | - | - | - | 28 | 124 | 232 | 25 | 600 | 255 | .4 | - | - |
| 5 | 14 | 62 | 15.0 | 8.1 | 8.0 | 2.0 | 20 | - | - | - | 28 | 120 | 216 | 22 | 300 | 237 | .4 | 603 | 2500 |
| 5 | 21 | 62 | 15.0 | 8.1 | 8.0 | 2.0 | 16 | - | - | - | 30 | 160 | 232 | 20 | 350 | 237 | .4 | 565 | 4000 |
| 5 | 28 | 62 | 15.0 | 7.8 | 8.1 | 4.4 | 33 | - | - | - | 33 | 176 | 216 | 56 | 1440 | 180 | .4 | 592 | - |
| 6 | 11 | 62 | 21.0 | 8.1 | 8.1 | 3.0 | 21 | - | - | - | 30 | 162 | 200 | 40 | 175 | 205 | .4 | 501 | 2100 |
| 6 | 4 | 62 | 17.0 | 8.7 | 8.1 | 2.4 | 13 | - | - | - | 18 | 164 | 208 | 30 | 275 | 187 | .4 | 540 | 10000 |
| 6 | 18 | 62 | 19.0 | 7.6 | 8.0 | 3.8 | 31 | - | - | - | 26 | 198 | 176 | 60 | 200 | 170 | .4 | 451 | 12000 |
| 6 | 25 | 62 | 19.0 | 7.4 | 8.0 | 6.9 | 39 | - | - | - | 35 | 224 | 224 | 60 | 4000 | 150 | .4 | 576 | 220000 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 2 | 62 | 22.0 | 6.3 | 8.0 | 5.6 | 52 | - | - | - | 36 | 180 | 184 | 120 | 2400 | 177 | .4 | 421 | - |
| 7 | 9 | 62 | 23.0 | 7.1 | 8.0 | 2.5 | 6 | - | - | - | 28 | 96 | 244 | 28 | 400 | 270 | .4 | 541 | 3000 |
| 7 | 16 | 62 | 20.0 | 8.1 | 8.0 | 2.1 | 13 | - | - | - | 15 | 130 | 208 | 22 | 500 | 162 | .4 | 472 | 7000 |
| 7 | 23 | 62 | 20.0 | 7.5 | 8.0 | 2.5 | 12 | - | - | - | 20 | 124 | 184 | 20 | 450 | 180 | .4 | 466 | 5000 |
| 7 | 30 | 62 | 21.0 | 7.9 | 8.0 | 2.0 | 4 | - | - | - | 22 | 122 | 224 | 17 | 425 | 140 | .4 | 436 | 4200 |
| 8 | 6 | 62 | 21.0 | 7.5 | 8.0 | 1.1 | 2 | - | - | - | 20 | 120 | 236 | 16 | 800 | 200 | .4 | 492 | 2000 |
| 8 | 13 | 62 | 21.0 | 8.1 | 8.1 | 1.4 | 21 | - | - | - | 17 | 112 | 200 | 16 | 270 | 196 | .4 | 424 | 2100 |
| 8 | 20 | 62 | 21.0 | 8.1 | 8.1 | 1.6 | - | - | - | - | 18 | 116 | 218 | 16 | 300 | 215 | .4 | 420 | 900 |
| 8 | 27 | 62 | 21.0 | 8.1 | 8.1 | 1.7 | - | - | - | - | 20 | 142 | 216 | 14 | 260 | 205 | .4 | 445 | 900 |
| 9 | 4 | 62 | 15.0 | 9.0 | 8.2 | 1.8 | - | - | - | - | 20 | 150 | 248 | 13 | 175 | 175 | .4 | 520 | *170 |
| 9 | 10 | 62 | 11.0 | 9.8 | 8.0 | 1.5 | 11 | - | - | - | 19 | 176 | 240 | 15 | 150 | 220 | .4 | 531 | 2000 |
| 9 | 17 | 62 | 12.0 | 8.4 | 8.0 | 1.7 | 0 | - | - | - | 20 | 180 | 232 | 15 | 150 | 260 | .4 | 540 | 2700 |
| 9 | 24 | 62 | 16.0 | 8.4 | 8.0 | 1.4 | - | - | - | - | 21 | 180 | 240 | 18 | 100 | 208 | .4 | 554 | 1000 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Wyoming-Nebraska State Line
Operated by U.S. Geological Survey

MAJOR BASIN Missouri River

MINOR BASIN North Platte River

STATION LOCATION North Platte River above
Henry, Nebraska

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .295 | .320 | .305 | .260 | .260 | .182 | .374 | .280 | .565 | 1.000 | 1.140 | 1.160 |
| 2 | .246 | .315 | .300 | .255 | .265 | .222 | .350 | .260 | .537 | 1.260 | 1.120 | 1.140 |
| 3 | .230 | .310 | .305 | .255 | .265 | .234 | .335 | .270 | .544 | 1.160 | 1.030 | 1.100 |
| 4 | .230 | .310 | .310 | .255 | .270 | .234 | .315 | .270 | .621 | .810 | .912 | 1.010 |
| 5 | .238 | .305 | .310 | .260 | .265 | .242 | .310 | .265 | .635 | .544 | .852 | 1.010 |
| 6 | .234 | .305 | .310 | .260 | .265 | .265 | .320 | .383 | .614 | .416 | .960 | .968 |
| 7 | .222 | .305 | .305 | .260 | .255 | .270 | .345 | .817 | .621 | .345 | 1.320 | .896 |
| 8 | .280 | .305 | .305 | .230 | .250 | .270 | .356 | .888 | .642 | .423 | 1.160 | .810 |
| 9 | .374 | .305 | .285 | .196 | .246 | .285 | .345 | 1.100 | .614 | .859 | .960 | .782 |
| 10 | .380 | .305 | .280 | .178 | .250 | .300 | .335 | 1.100 | .621 | 1.020 | 1.010 | .761 |
| 11 | .362 | .310 | .270 | .164 | .255 | .300 | .320 | 1.210 | .656 | .912 | 1.090 | .761 |
| 12 | .356 | .310 | .265 | .150 | .250 | .280 | .300 | 1.310 | .649 | .852 | 1.150 | .705 |
| 13 | .362 | .305 | .265 | .144 | .250 | .270 | .295 | 1.300 | .684 | 1.020 | 1.100 | .628 |
| 14 | .362 | .300 | .250 | .138 | .250 | .270 | .290 | 1.290 | .558 | 1.200 | 1.070 | .600 |
| 15 | .362 | .300 | .260 | .138 | .255 | .270 | .285 | 1.280 | .656 | .960 | 1.050 | .565 |
| 16 | .345 | .295 | .260 | .144 | .285 | .265 | .270 | .968 | .691 | .904 | 1.070 | .551 |
| 17 | .340 | .305 | .255 | .140 | .295 | .260 | .270 | .530 | .904 | .817 | 1.130 | .551 |
| 18 | .335 | .310 | .260 | .128 | .290 | .260 | .285 | .593 | .944 | .761 | 1.140 | .544 |
| 19 | .335 | .310 | .265 | .118 | .285 | .246 | .290 | .607 | .912 | .733 | 1.200 | .506 |
| 20 | .340 | .305 | .265 | .115 | .280 | .242 | .280 | .452 | .859 | .726 | 1.220 | .476 |
| 21 | .340 | .305 | .280 | .110 | .265 | .242 | .275 | .446 | .817 | .952 | 1.170 | .476 |
| 22 | .330 | .300 | .275 | .105 | .260 | .238 | .285 | .488 | .912 | 1.060 | 1.150 | .494 |
| 23 | .310 | .305 | .270 | .105 | .255 | .234 | .295 | .428 | .984 | 1.330 | 1.180 | .506 |
| 24 | .305 | .310 | .270 | .128 | .234 | .234 | .310 | .392 | .747 | 1.420 | 1.220 | .494 |
| 25 | .305 | .310 | .275 | .135 | .218 | .230 | .226 | .579 | .663 | 1.340 | 1.230 | .494 |
| 26 | .310 | .315 | .280 | .138 | .206 | .234 | .158 | .838 | .565 | 1.250 | 1.210 | .464 |
| 27 | .310 | .315 | .275 | .164 | .196 | .238 | .154 | .761 | .635 | 1.130 | 1.210 | .434 |
| 28 | .315 | .315 | .246 | .206 | .182 | .242 | .214 | .796 | .768 | 1.110 | 1.160 | .428 |
| 29 | .320 | .310 | .260 | .242 |  | .250 | .265 | .628 | .992 | 1.160 | 1.130 | .524 |
| 30 | .320 | .300 | .255 | .246 |  | .280 | .285 | .558 | .831 | 1.190 | 1.150 | .649 |
| 31 | .315 |  | .255 | .250 |  | .386 |  | .565 |  | 1.210 | 1.230 |  |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.
**STATION LOCATION** OHIO RIVER AT
CAIRO, ILLINOIS 35

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 12 | 27 | 61 | 1 | 10 | 2 | 2 | 0 | 1 | 2 | 2 | 24 | 7 | 17 | 5 | 41 | 9 | | | | | | |
| 1 | 2 | 62 | 1 | 12 | – | – | – | – | – | – | 30 | 8 | 13 | 7 | 43 | 11 | | | | | | |
| 1 | 8 | 62 | 1 | 15 | 5 | 3 | 1 | 1 | 6 | 3 | 62 | 10 | 20 | 7 | 82 | 12 | | | | | | |
| 1 | 15 | 62 | 1 | 29 | – | – | – | – | – | – | 127 | 13 | 30 | 8 | 157 | 15 | | | | | | |
| 1 | 22 | 62 | 2 | 1 | – | – | – | – | – | – | 95 | 9 | 29 | 7 | 124 | 12 | | | | | | |
| 1 | 29 | 62 | 2 | 12 | 5 | 4 | 0 | 1 | 5 | 4 | 88 | 9 | 32 | 6 | 120 | 11 | | | | | | |
| 2 | 5 | 62 | 2 | 14 | – | – | – | – | – | – | 61 | 10 | 41 | 10 | 102 | 14 | | | | | | |
| 2 | 11 | 62 | 2 | 21 | 2 | 2 | 0 | 1 | 2 | 2 | 74 | 8 | 39 | 6 | 113 | 10 | | | | | | |
| 2 | 19 | 62 | 3 | 6 | – | – | – | – | – | – | 41 | 9 | 11 | 7 | 52 | 11 | | | | | | |
| 2 | 26 | 62 | 3 | 12 | – | – | – | – | – | – | 132 | 13 | 32 | 8 | 164 | 15 | | | | | | |
| 3 | 5 | 62 | 3 | 16 | – | – | – | – | – | – | 121 | 13 | 36 | 7 | 157 | 15 | | | | | | |
| 3 | 12 | 62 | 3 | 20 | 2 | 2 | 1 | 1 | 3 | 2 | 69 | 10 | 29 | 6 | 98 | 12 | | | | | | |
| 3 | 19 | 62 | 4 | 6 | – | – | – | – | – | – | 57 | 7 | 32 | 6 | 89 | 9 | | | | | | |
| 3 | 28 | 62 | 4 | 12 | – | – | – | – | – | – | 102 | 10 | 36 | 8 | 138 | 13 | | | | | | |
| 4 | 2 | 62 | 4 | 12 | – | – | – | – | – | – | 95 | 9 | 42 | 8 | 137 | 12 | | | | | | |
| 4 | 10 | 62 | 4 | 27 | 14 | 7 | 0 | 2 | 14 | 7 | 158 | 17 | 14 | 5 | 172 | 18 | | | | | | |
| 4 | 23 | 62 | 5 | 25 | – | – | – | – | – | – | 30 | 9 | 19 | 8 | 49 | 12 | | | | | | |
| 4 | 30 | 62 | 5 | 25 | – | – | – | – | – | – | 25 | 10 | 8 | 9 | 33 | 13 | | | | | | |
| 5 | 7 | 62 | 6 | 19 | – | – | – | – | – | – | 21 | 10 | 15 | 9 | 36 | 13 | | | | | | |
| 5 | 14 | 62 | 6 | 20 | 1 | 1 | 0 | 1 | 1 | 1 | 15 | 8 | 14 | 9 | 29 | 12 | | | | | | |
| 5 | 21 | 62 | 6 | 27 | – | – | – | – | – | – | 2 | 6 | 20 | 8 | 22 | 10 | | | | | | |
| 5 | 29 | 62 | 6 | 28 | – | – | – | – | – | – | 6 | 6 | 26 | 7 | 32 | 9 | | | | | | |
| 6 | 5 | 62 | 7 | 6 | – | – | – | – | – | – | 0 | 5 | 18 | 6 | 18 | 8 | | | | | | |
| 6 | 11 | 62 | 7 | 9 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 6 | 23 | 8 | 25 | 10 | | | | | | |
| 6 | 18 | 62 | 7 | 17 | – | – | – | – | – | – | 7 | 5 | 19 | 8 | 26 | 9 | | | | | | |
| 6 | 26 | 62 | 7 | 24 | – | – | – | – | – | – | 4 | 5 | 23 | 7 | 27 | 9 | | | | | | |
| 7 | 2 | 62 | 8 | 6 | – | – | – | – | – | – | 1 | 5 | 22 | 7 | 23 | 9 | | | | | | |
| 7 | 10 | 62 | 8 | 7 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 5 | 26 | 8 | 28 | 9 | | | | | | |
| 7 | 16 | 62 | 8 | 14 | – | – | – | – | – | – | 5 | 5 | 24 | 7 | 29 | 8 | | | | | | |
| 7 | 23 | 62 | 8 | 15 | – | – | – | – | – | – | 0 | 6 | 19 | 7 | 19 | 9 | | | | | | |
| 7 | 31 | 62 | 8 | 21 | – | – | – | – | – | – | 9 | 5 | 23 | 5 | 32 | 7 | | | | | | |
| 8 | 7 | 62 | 9 | 30 | – | – | – | – | – | – | 14 | 11 | 11 | 15 | 25 | 19 | | | | | | |
| 8 | 27 | 62 | 9 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 20 | 7 | 21 | 8 | | | | | | |
| 9 | 4 | 62 | 9 | 28 | – | – | – | – | – | – | 16 | 7 | 16 | 8 | 32 | 11 | | | | | | |
| 9 | 10 | 62 | 9 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 24 | 9 | 25 | 11 | | | | | | |
| 9 | 17 | 62 | 10 | 14 | – | – | – | – | – | – | 2 | 5 | 15 | 7 | 17 | 9 | | | | | | |
| 9 | 24 | 62 | 10 | 17 | – | – | – | – | – | – | 2 | 7 | 10 | 8 | 12 | 11 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** ILLINOIS

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER AT

CAIRO, ILLINOIS 35

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 2700 | 80 | 80 | 730 | 0 | 80 | 0 | 1640 | 80 | 150 | 40 | 69 | 7 | 35 | 2 | 71 | 1 | 68 | 1 | | | | | | | | | | | | |
| 10 | 16 | 61 | 5300 | 80 | 80 | 930 | 60 | 100 | 20 | 3830 | 210 | 600 | 170 | 69 | 4 | 71 | 4 | 68 | 3 | 38 | 1 | 35 | 1 | 92 | 1 | | | | | | | | |
| 11 | 7 | 61 | 1300 | 0 | 20 | 250 | 180 | 20 | 0 | 630 | 160 | 670 | 70 | 71 | 2 | 68 | 1 | 50 | 1 | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 2400 | 20 | 0 | 60 | 0 | 40 | 0 | 2150 | 120 | 0 | 20 | 71 | 4 | 68 | 2 | | | | | | | | | | | | | | | | |
| 12 | 5 | 61 | 2900 | 0 | 0 | 470 | 0 | 180 | 0 | 1990 | 220 | 1650 | 940 | 69 | 3 | 68 | 2 | 38 | 1 | 57 | 1 | | | | | | | | | | | | |
| 12 | 18 | 61 | 2300 | 0 | 0 | 120 | 0 | 80 | 0 | 1330 | 730 | 290 | 210 | 69 | 3 | 68 | 2 | 71 | 1 | 92 | 1 | 82 | 1 | | | | | | | | | | |
| 1 | 2 | 62 | 1300 | 0 | 0 | 60 | 0 | 20 | 0 | 620 | 600 | 80 | 310 | 69 | 2 | 94 | 2 | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 1700 | 0 | 0 | 60 | 0 | 60 | 0 | 540 | 1060 | 350 | 440 | 82 | 2 | 92 | 2 | 69 | 1 | 68 | 1 | | | | | | | | | | | | |
| 2 | 5 | 62 | 1100 | 0 | 0 | 20 | 0 | 80 | 0 | 330 | 680 | 150 | 120 | 68 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 500 | 0 | 0 | 50 | 0 | 50 | 0 | 160 | 270 | 20 | 140 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 600 | 0 | 0 | 20 | 0 | 20 | 0 | 280 | 300 | 0 | 110 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 200 | 0 | 0 | 0 | 0 | 50 | 0 | 110 | 90 | 0 | 50 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 600 | 0 | 0 | 0 | 0 | 60 | 0 | 190 | 370 | 100 | 60 | | | | | | | | | | | | | | | | | | | | |
| 4 | 17 | 62 | 1900 | 20 | 0 | 0 | 0 | 330 | 100 | 930 | 540 | 270 | 270 | 92 | 2 | 69 | 1 | 51 | 1 | 68 | 1 | 71 | 1 | 82 | 1 | | | | | | | | |
| 5 | 7 | 62 | 2400 | 150 | 0 | 130 | 0 | 60 | 0 | 1650 | 420 | 3590 | 610 | 71 | 4 | 68 | 2 | 92 | 1 | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 2800 | 0 | 60 | 270 | 320 | 40 | 0 | 1650 | 510 | 380 | 170 | 71 | 4 | 50 | 2 | 68 | 1 | 69 | 1 | | | | | | | | | | | | |
| 6 | 5 | 62 | 10400 | 7740 | 0 | 290 | 0 | 210 | 40 | 1660 | 500 | 660 | 210 | 4 | 6 | 71 | 3 | 69 | 2 | 68 | 2 | 92 | 1 | 51 | 1 | | | | | | | | |
| 6 | 18 | 62 | 1500 | 0 | 0 | 150 | 60 | 0 | 0 | 530 | 800 | 1690 | 1600 | 92 | 3 | 68 | 1 | 69 | 1 | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 1700 | 0 | 0 | 0 | 380 | 0 | 0 | 680 | 680 | 340 | 0 | 92 | 2 | 50 | 2 | 84 | 2 | 68 | 1 | 69 | 1 | | | | | | | | | | |
| 7 | 16 | 62 | 200 | 0 | 0 | 90 | 0 | 0 | 0 | 50 | 50 | 70 | 180 | | | | | | | | | | | | | | | | | | | | |
| 8 | 7 | 62 | 300 | 0 | 0 | 40 | 40 | 60 | 0 | 40 | 120 | 40 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 22 | 62 | 100 | 0 | 0 | 0 | 0 | 40 | 0 | 40 | 40 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 80 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 330 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 82 | 38 | 26 | 36 | 56 | 8 | 84 | 3 | 15 | 0 | 10 | 98 | 11 | 4 | 17 | 1 | 22 | 1 | | | | | 9 | 52 | 1 | 53 | 1 | | | 0 | 0 |
| 10 | 16 | 61 | 56 | 57 | 82 | 10 | 89 | 9 | 26 | 9 | 15 | 0 | 0 | 113 | 11 | 3 | 17 | 3 | 22 | 3 | | | | | 20 | 51 | 3 | 76 | 1 | | | 0 | 0 |
| 11 | 7 | 61 | 82 | 34 | 56 | 31 | 26 | 8 | 89 | 8 | 19 | 0 | 0 | 127 | 11 | 5 | 17 | 2 | 22 | 1 | | | | | 3 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 82 | 47 | 56 | 24 | 26 | 10 | 89 | 7 | 12 | 2110 | 0 | 11 | 11 | 1 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 12 | 5 | 61 | 56 | 85 | 58 | 4 | 92 | 4 | 10 | 2 | 5 | 0 | 0 | 30 | 11 | 3 | | | | | | | | | 3 | 51 | 1 | | | | | 0 | 0 |
| 12 | 18 | 61 | 56 | 65 | 36 | 5 | 92 | 5 | 16 | 3 | 22 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 56 | 22 | 89 | 8 | 92 | 7 | 58 | 7 | 56 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 36 | 19 | 56 | 19 | 92 | 16 | 62 | 8 | 38 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 56 | 22 | 36 | 11 | 92 | 11 | 62 | 11 | 46 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 56 | 31 | 92 | 11 | 47 | 7 | 62 | 6 | 45 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 92 | 15 | 56 | 10 | 26 | 9 | 65 | 5 | 61 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 47 | 22 | 92 | 16 | 62 | 10 | 36 | 7 | 45 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 17 | 62 | 92 | 19 | 56 | 17 | 89 | 7 | 36 | 7 | 50 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 82 | 46 | 92 | 13 | 56 | 9 | 26 | 7 | 25 | 20 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 82 | 27 | 56 | 26 | 57 | 8 | 58 | 7 | 32 | 0 | 0 | 5 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 6 | 5 | 62 | 82 | 24 | 56 | 21 | 26 | 14 | 92 | 11 | 30 | 40 | 0 | 42 | 22 | 3 | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 92 | 61 | 56 | 12 | 58 | 5 | 45 | 3 | 19 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 45 | 39 | 92 | 22 | 56 | 11 | 26 | 8 | 20 | 0 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 56 | 44 | 82 | 18 | 26 | 7 | 92 | 6 | 25 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 7 | 62 | 26 | 48 | 58 | 13 | 92 | 8 | 56 | 8 | 23 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 22 | 62 | 82 | 27 | 26 | 10 | 56 | 8 | 58 | 7 | 48 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 56 | 20 | 26 | 16 | 82 | 11 | 58 | 7 | 46 | 0 | 0 | 0 | | | | | | | | | | | 3 | 51 | 1 | | | | | 0 | 2 |
| 9 | 17 | 62 | 26 | 14 | 92 | 11 | 82 | 8 | 68 | 8 | 59 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

## NATIONAL WATER QUALITY NETWORK

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** ILLINOIS
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** OHIO RIVER MAIN STEM & MINOR TRIB.
**STATION LOCATION** OHIO RIVER AT
CAIRO, ILLINOIS 3

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 11 | 6 | 61 | 11 | 15 | 1866 | 385 | 79 | 306 | 2 | 19 | 32 | 4 | 1 | 25 | 2 | 8 | 5 | 2 | 11 |
| 12 | 13 | 61 | 12 | 26 | 3347 | 186 | 80 | 106 | 2 | 22 | 25 | 5 | 5 | 15 | 0 | 9 | 7 | 1 | 14 |
| 1 | 24 | 62 | 2 | 11 | 2537 | 298 | 152 | 146 | 14 | 38 | 41 | 5 | 5 | 27 | 4 | 14 | 14 | 3 | 28 |
| 3 | 2 | 62 | 3 | 13 | 4942 | 122 | 59 | 63 | 3 | 14 | 18 | 3 | 3 | 11 | 1 | 7 | 7 | 1 | 9 |
| 4 | 9 | 62 | 4 | 23 | 6355 | 90 | 36 | 54 | 1 | 8 | 14 | 2 | 2 | 9 | 1 | 4 | 5 | 0 | 4 |
| 5 | 18 | 62 | 5 | 29 | 5079 | 124 | 60 | 64 | 1 | 16 | 18 | 2 | 1 | 14 | 1 | 5 | 7 | 1 | 12 |
| 6 | 25 | 62 | 7 | 13 | 5202 | 150 | 80 | 70 | 1 | 20 | 26 | 2 | 2 | 21 | 1 | 10 | 8 | 1 | 14 |
| 8 | 18 | 62 | 8 | 27 | 4656 | 165 | 63 | 102 | 1 | 15 | 20 | 2 | 1 | 16 | 1 | 9 | 5 | 1 | 12 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 9 | 61 | 14.8 | 10.8 | 7.5 | 1.7 | 9 | .2 | 2.5 | .0 | 23 | 78 | 126 | - | 20 | - | - | - | - |
| 10 | 16 | 61 | 19.9 | 13.3 | 7.9 | 2.1 | - | .3 | 2.5 | .0 | 18 | 72 | 118 | - | 55 | - | - | - | - |
| 10 | 23 | 61 | 17.0 | 10.5 | 7.5 | 2.0 | - | .3 | 2.2 | .0 | 20 | 74 | 110 | - | 30 | - | - | - | - |
| 10 | 30 | 61 | 17.0 | 10.7 | 7.5 | 2.1 | - | .3 | 2.3 | .0 | 12 | 80 | 122 | - | 48 | - | - | - | - |
| 11 | 13 | 61 | 14.0 | 12.0 | 7.7 | 1.6 | - | .2 | 2.5 | .0 | 31 | 75 | 136 | - | 20 | - | - | - | - |
| 11 | 15 | 61 | - | - | - | - | 20 | - | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 20 | 61 | 12.0 | 12.0 | 7.5 | 2.4 | - | .2 | 2.8 | .0 | 27 | 78 | 156 | - | 30 | - | - | - | - |
| 11 | 27 | 61 | 10.9 | 10.9 | 7.5 | 2.4 | - | .2 | 2.5 | .0 | 34 | 75 | 136 | - | 48 | - | - | - | - |
| 12 | 5 | 61 | 10.4 | 10.2 | 7.6 | 1.5 | - | .3 | 2.6 | - | 40 | 76 | 198 | - | 130 | - | - | - | - |
| 12 | 11 | 61 | 7.4 | 12.7 | 7.5 | 2.8 | - | .2 | 2.2 | - | 32 | 68 | 160 | - | 190 | - | - | - | - |
| 12 | 19 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 10000 |
| 12 | 20 | 61 | 6.0 | 12.9 | 7.3 | 2.6 | - | .2 | 1.8 | - | 23 | 74 | 144 | - | 250 | - | - | - | - |
| 12 | 26 | 61 | 5.9 | 12.4 | 7.5 | 4.0 | 22 | .2 | 1.8 | - | 19 | 64 | 108 | - | 350 | - | - | - | - |
| 12 | 27 | 61 | - | - | - | - | - | - | - | - | 16 | - | - | - | - | 50 | .0 | - | 3500 |
| 1 | 2 | 62 | 4.4 | 13.5 | 7.5 | 4.1 | - | .2 | 2.3 | - | 18 | 68 | 116 | - | 350 | 55 | .0 | 176 | 4200 |
| 1 | 8 | 62 | 4.2 | 14.8 | 7.5 | 4.6 | - | .3 | 2.2 | - | 20 | 70 | 120 | - | 180 | 46 | .0 | - | 2100 |
| 1 | 15 | 62 | 1.6 | 14.3 | 7.5 | 4.4 | - | .4 | 2.6 | - | 16 | 85 | 140 | - | 400 | 48 | - | - | 11000 |
| 1 | 22 | 62 | 1.6 | 14.5 | 7.5 | 3.3 | - | .4 | 2.4 | - | 8 | 66 | 118 | - | 360 | 45 | - | - | 3600 |
| 1 | 29 | 62 | - | - | - | - | - | - | - | - | 11 | - | - | - | - | 39 | - | - | 6000 |
| 2 | 5 | 62 | - | - | - | - | - | - | - | - | 14 | - | - | - | - | 38 | - | 156 | 2900 |
| 2 | 11 | 62 | - | - | - | - | 18 | - | - | - | 13 | - | - | - | - | 50 | - | - | 300 |
| 2 | 19 | 62 | 5.3 | 13.9 | 7.5 | 3.9 | - | .2 | 2.8 | - | 18 | 85 | 140 | - | 150 | - | - | - | 2600 |
| 2 | 26 | 62 | 7.0 | 14.3 | 7.5 | 3.6 | - | .2 | 2.4 | - | 15 | 73 | 112 | - | 450 | 50 | .0 | - | 7300 |
| 3 | 5 | 62 | 6.2 | 13.3 | 7.4 | 4.2 | - | .2 | 2.4 | - | 4 | 65 | 116 | - | 625 | - | - | - | 8000 |
| 3 | 12 | 62 | 6.0 | 12.3 | 7.2 | 2.3 | - | .2 | 2.2 | .7 | 10 | 40 | 90 | - | 400 | - | - | - | 3200 |
| 3 | 19 | 62 | 6.3 | 11.5 | 7.4 | 2.4 | - | .2 | 2.3 | .2 | 11 | 68 | 114 | - | 160 | - | - | - | 1200 |
| 3 | 28 | 62 | 9.0 | 11.1 | 7.5 | 2.3 | - | .3 | 2.3 | .7 | 12 | 70 | 122 | - | 280 | - | - | - | 1600 |
| 4 | 2 | 62 | 9.9 | 11.2 | 7.3 | 2.3 | - | .2 | 2.5 | .4 | 12 | 66 | 110 | 0 | 230 | 49 | .1 | - | 2600 |
| 4 | 9 | 62 | 9.9 | 11.5 | 7.5 | 2.6 | - | .2 | 2.4 | .7 | 13 | 68 | 120 | - | 200 | - | - | - | - |
| 4 | 10 | 62 | 10.8 | 11.3 | 7.5 | 2.1 | - | .3 | 1.8 | - | 10 | 62 | 120 | - | - | 40 | .1 | 167 | 620 |
| 4 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 800 |
| 4 | 23 | 62 | 12.6 | 11.1 | 7.5 | 1.9 | 26 | .2 | 2.1 | .4 | 9 | 55 | 106 | 10 | 170 | - | - | - | 2100 |
| 4 | 30 | 62 | 16.2 | 9.7 | 7.4 | 2.6 | - | .2 | 2.8 | .4 | 14 | 65 | 124 | - | 115 | - | - | - | 1100 |
| 5 | 8 | 62 | 18.6 | 9.2 | 7.5 | 2.4 | - | .3 | 2.6 | .2 | 12 | 80 | 144 | 5 | 130 | 68 | - | - | - |
| 5 | 14 | 62 | 23.0 | 8.4 | 7.5 | 1.9 | - | .3 | 2.8 | .0 | 8 | 82 | 146 | 10 | 80 | 60 | - | - | - |
| 5 | 21 | 62 | 25.2 | 7.8 | 7.6 | 1.6 | - | .2 | 2.6 | .2 | 13 | 85 | 144 | - | 85 | - | - | - | 300 |
| 5 | 28 | 62 | 26.4 | 8.2 | 7.7 | 1.6 | 20 | .2 | 2.5 | .2 | 21 | 82 | 120 | 10 | 60 | 54 | - | - | - |
| 6 | 5 | 62 | 26.0 | 7.5 | 7.5 | 1.2 | - | .2 | 2.4 | .2 | 10 | 85 | 136 | 10 | 35 | 62 | .0 | - | 2300 |
| 6 | 11 | 62 | 2.7 | 7.4 | 7.5 | 1.4 | 21 | .2 | 2.4 | .0 | 17 | 82 | 140 | - | 40 | - | - | - | 100 |

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER AT

CAIRO, ILLINOIS 35

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 18 | 62 | 26.8 | 6.7 | 7.6 | 1.6 | - | .2 | 2.3 | .2 | 18 | 90 | 140 | - | 160 | - | - | - | 790 |
| 6 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 300 |
| 7 | 10 | 62 | 28.0 | 6.5 | 7.4 | 1.2 | - | .2 | 2.5 | .0 | 25 | 67 | 140 | - | 110 | - | - | - | 100 |
| 7 | 16 | 62 | - | - | - | - | 12 | - | - | - | - | - | - | - | - | - | - | - | *100 |
| 7 | 23 | 62 | 29.5 | 6.8 | 7.4 | 1.2 | - | .3 | 2.2 | .2 | 26 | 62 | 110 | 10 | 80 | 45 | .0 | 180 | 300 |
| 7 | 31 | 62 | 28.7 | 8.2 | 7.6 | .9 | - | .2 | 2.1 | .0 | 12 | 78 | 124 | 5 | 40 | 45 | .0 | 200 | 200 |
| 8 | 7 | 62 | 29.2 | 8.4 | 7.5 | 1.1 | - | .3 | 2.4 | .0 | 17 | 74 | 106 | 10 | 50 | 30 | .0 | - | 300 |
| 8 | 13 | 62 | 28.8 | 8.5 | 7.6 | 1.0 | - | .2 | 2.3 | .2 | 14 | 78 | 100 | - | 35 | - | - | - | 11000 |
| 8 | 20 | 62 | 28.8 | 8.5 | 7.5 | 1.2 | - | .2 | 1.9 | .0 | 17 | 75 | 110 | - | 25 | - | - | - | 900 |
| 8 | 27 | 62 | 28.0 | 8.5 | 7.5 | 1.0 | 13 | .2 | 1.8 | .2 | 17 | 62 | - | - | - | - | - | - | 1100 |
| 9 | 4 | 62 | 27.5 | 8.0 | 7.5 | .8 | - | .3 | 1.8 | .2 | 19 | 65 | 100 | - | 110 | - | - | - | 4900 |
| 9 | 10 | 62 | 25.8 | 8.7 | 7.4 | .8 | - | .5 | 1.8 | .3 | 23 | 68 | 104 | - | 35 | - | - | - | 3000 |
| 9 | 17 | 62 | 25.0 | 8.3 | 7.5 | .8 | - | .2 | 1.2 | .2 | 18 | 54 | 108 | - | 62 | - | - | - | 1200 |
| 9 | 24 | 62 | 23.8 | 9.4 | 7.5 | .6 | - | .2 | 1.2 | .3 | 13 | 60 | 100 | 5 | 25 | 40 | .0 | 175 | 100 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Metropolis, Illinois
Operated by U.S. Geological Survey

MAJOR BASIN Ohio River

MINOR BASIN Ohio River-Main Stem & Minor Trib.

STATION LOCATION Ohio River at

Cairo, Illinois

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 87.000 | 89.100 | 198.000 | 318.000 | 722.000 | 902.000 | 680.000 | 290.000 | 144.000 | 119.000 | 107.000 | 77.100 |
| 2 | 96.100 | 77.800 | 208.000 | 292.000 | 713.000 | 978.000 | 660.000 | 284.000 | 160.000 | 117.000 | 116.000 | 80.600 |
| 3 | 84.300 | 93.400 | 204.000 | 275.000 | 707.000 | 1030.000 | 671.000 | 279.000 | 153.000 | 111.000 | 106.000 | 94.200 |
| 4 | 83.500 | 102.000 | 198.000 | 263.000 | 694.000 | 1030.000 | 696.000 | 275.000 | 147.000 | 106.000 | 102.000 | 104.000 |
| 5 | 96.900 | 101.000 | 162.000 | 238.000 | 672.000 | 1020.000 | 685.000 | 268.000 | 154.000 | 105.000 | 99.500 | 110.000 |
| 6 | 91.900 | 98.700 | 112.000 | 233.000 | 646.000 | 1030.000 | 672.000 | 262.000 | 152.000 | 127.000 | 91.100 | 105.000 |
| 7 | 92.900 | 95.000 | 125.000 | 289.000 | 600.000 | 1030.000 | 662.000 | 257.000 | 145.000 | 153.000 | 86.000 | 85.700 |
| 8 | 82.400 | 103.000 | 131.000 | 360.000 | 549.000 | 1050.000 | 649.000 | 251.000 | 147.000 | 168.000 | 97.800 | 83.800 |
| 9 | 83.300 | 119.000 | 146.000 | 388.000 | 490.000 | 1060.000 | 647.000 | 243.000 | 183.000 | 154.000 | 108.000 | 80.600 |
| 10 | 98.800 | 115.000 | 208.000 | 404.000 | 453.000 | 1080.000 | 634.000 | 232.000 | 151.000 | 139.000 | 103.000 | 86.900 |
| 11 | 85.700 | 99.200 | 276.000 | 413.000 | 425.000 | 1090.000 | 651.000 | 212.000 | 134.000 | 139.000 | 98.100 | 74.400 |
| 12 | 75.700 | 98.900 | 332.000 | 408.000 | 391.000 | 1080.000 | 670.000 | 188.000 | 149.000 | 130.000 | 88.700 | 81.100 |
| 13 | 77.200 | 91.400 | 348.000 | 411.000 | 395.000 | 1070.000 | 700.000 | 180.000 | 178.000 | 136.000 | 81.800 | 70.000 |
| 14 | 77.000 | 142.000 | 372.000 | 402.000 | 393.000 | 1040.000 | 709.000 | 200.000 | 184.000 | 120.000 | 84.200 | 98.800 |
| 15 | 65.900 | 151.000 | 399.000 | 427.000 | 380.000 | 1000.000 | 724.000 | 213.000 | 182.000 | 113.000 | 74.900 | 96.800 |
| 16 | 77.500 | 144.000 | 411.000 | 435.000 | 367.000 | 977.000 | 727.000 | 196.000 | 179.000 | 135.000 | 72.000 | 91.800 |
| 17 | 79.100 | 136.000 | 429.000 | 421.000 | 357.000 | 944.000 | 730.000 | 189.000 | 174.000 | 141.000 | 75.300 | 94.600 |
| 18 | 71.100 | 128.000 | 471.000 | 401.000 | 345.000 | 907.000 | 733.000 | 181.000 | 171.000 | 162.000 | 77.400 | 100.000 |
| 19 | 84.400 | 125.000 | 516.000 | 384.000 | 334.000 | 875.000 | 734.000 | 155.000 | 154.000 | 197.000 | 69.700 | 109.000 |
| 20 | 75.400 | 133.000 | 546.000 | 368.000 | 315.000 | 846.000 | 730.000 | 108.000 | 134.000 | 189.000 | 65.900 | 107.000 |
| 21 | 83.500 | 133.000 | 570.000 | 358.000 | 300.000 | 822.000 | 715.000 | 122.000 | 132.000 | 125.000 | 70.300 | 94.100 |
| 22 | 91.900 | 135.000 | 579.000 | 377.000 | 301.000 | 783.000 | 687.000 | 133.000 | 143.000 | 126.000 | 60.600 | 77.900 |
| 23 | 92.300 | 166.000 | 590.000 | 411.000 | 328.000 | 743.000 | 642.000 | 123.000 | 135.000 | 132.000 | 62.700 | 69.900 |
| 24 | 101.000 | 161.000 | 606.000 | 484.000 | 407.000 | 706.000 | 578.000 | 123.000 | 132.000 | 125.000 | 69.500 | 73.100 |
| 25 | 103.000 | 171.000 | 612.000 | 566.000 | 481.000 | 653.000 | 497.000 | 118.000 | 140.000 | 113.000 | 70.000 | 75.900 |
| 26 | 111.000 | 170.000 | 614.000 | 618.000 | 581.000 | 590.000 | 430.000 | 112.000 | 141.000 | 141.000 | 67.100 | 71.600 |
| 27 | 107.000 | 173.000 | 583.000 | 664.000 | 695.000 | 578.000 | 371.000 | 118.000 | 139.000 | 130.000 | 81.000 | 76.100 |
| 28 | 94.500 | 171.000 | 523.000 | 689.000 | 824.000 | 587.000 | 333.000 | 133.000 | 124.000 | 126.000 | 73.200 | 76.700 |
| 29 | 86.700 | 176.000 | 440.000 | 713.000 |  | 610.000 | 314.000 | 143.000 | 126.000 | 120.000 | 72.000 | 74.300 |
| 30 | 89.600 | 187.000 | 397.000 | 721.000 |  | 632.000 | 300.000 | 147.000 | 127.000 | 115.000 | 79.100 | 79.000 |
| 31 | 92.000 |  | 354.000 | 722.000 |  | 658.000 |  | 153.000 |  | 104.000 | 73.600 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** INDIANA
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.
**STATION LOCATION** OHIO RIVER AT
EVANSVILLE, INDIANA 36

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 13 | - | - | - | - | - | - | 2 | 4 | 16 | 6 | 18 | 7 | | | | | | | |
| 10 | 9 | 61 | 10 | 19 | 0 | 1 | 1 | 2 | 1 | 2 | 0 | 4 | 6 | 6 | 6 | 7 | | | | | | | |
| 10 | 16 | 61 | 10 | 25 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 4 | 10 | 6 | 10 | 7 | | | | | | | |
| 10 | 23 | 61 | 10 | 31 | - | - | - | - | - | - | 64 | 12 | 56 | 14 | 120 | 18 | | | | | | | |
| 10 | 30 | 61 | 11 | 3 | - | - | - | - | - | - | 0 | 10 | 9 | 12 | 9 | 16 | | | | | | | |
| 11 | 6 | 61 | 11 | 17 | - | - | - | - | - | - | 5 | 8 | 14 | 10 | 19 | 13 | | | | | | | |
| 11 | 13 | 61 | 11 | 28 | 0 | 1 | 0 | 2 | 0 | 2 | 14 | 8 | 46 | 12 | 60 | 14 | | | | | | | |
| 11 | 20 | 61 | 11 | 28 | - | - | - | - | - | - | 13 | 11 | 14 | 13 | 27 | 17 | | | | | | | |
| 11 | 27 | 61 | 12 | 1 | - | - | - | - | - | - | 15 | 6 | 17 | 8 | 32 | 10 | | | | | | | |
| 12 | 5 | 61 | 12 | 12 | - | - | - | - | - | - | 15 | 5 | 21 | 7 | 36 | 9 | | | | | | | |
| 12 | 11 | 61 | 12 | 18 | 3 | 1 | 0 | 1 | 3 | 1 | 27 | 6 | 15 | 6 | 42 | 8 | | | | | | | |
| 12 | 18 | 61 | 12 | 28 | - | - | - | - | - | - | 5 | 5 | 15 | 5 | 20 | 7 | | | | | | | |
| 1 | 2 | 62 | 1 | 12 | - | - | - | - | - | - | 16 | 8 | 11 | 7 | 27 | 11 | | | | | | | |
| 1 | 8 | 62 | 1 | 18 | 2 | 1 | 1 | 1 | 3 | 1 | 20 | 6 | 15 | 5 | 35 | 8 | | | | | | | |
| 1 | 15 | 62 | 1 | 24 | - | - | - | - | - | - | 65 | 9 | 18 | 6 | 83 | 11 | | | | | | | |
| 1 | 22 | 62 | 1 | 31 | - | - | - | - | - | - | 71 | 9 | 26 | 7 | 97 | 11 | | | | | | | |
| 1 | 29 | 62 | 2 | 8 | - | - | - | - | - | - | 43 | 7 | 20 | 5 | 63 | 9 | | | | | | | |
| 2 | 5 | 62 | 2 | 13 | - | - | - | - | - | - | 23 | 7 | 24 | 7 | 47 | 10 | | | | | | | |
| 2 | 13 | 62 | 2 | 20 | 2 | 2 | 0 | 1 | 2 | 2 | 52 | 7 | 20 | 5 | 72 | 9 | | | | | | | |
| 2 | 19 | 62 | 3 | 2 | - | - | - | - | - | - | 13 | 6 | 17 | 7 | 30 | 9 | | | | | | | |
| 2 | 26 | 62 | 3 | 9 | - | - | - | - | - | - | 66 | 16 | 19 | 7 | 85 | 17 | | | | | | | |
| 3 | 5 | 62 | 3 | 16 | - | - | - | - | - | - | 77 | 12 | 1 | 6 | 78 | 13 | | | | | | | |
| 3 | 12 | 62 | 3 | 23 | 3 | 1 | 0 | 1 | 3 | 1 | 38 | 6 | 29 | 5 | 67 | 8 | | | | | | | |
| 3 | 19 | 62 | 4 | 4 | - | - | - | - | - | - | 47 | 8 | 17 | 7 | 64 | 11 | | | | | | | |
| 3 | 26 | 62 | 4 | 17 | - | - | - | - | - | - | 174 | 14 | 42 | 8 | 216 | 16 | | | | | | | |
| 4 | 2 | 62 | 4 | 12 | - | - | - | - | - | - | 51 | 8 | 14 | 7 | 65 | 11 | | | | | | | |
| 4 | 9 | 62 | 4 | 23 | 5 | 3 | 0 | 1 | 5 | 3 | 69 | 12 | 21 | 6 | 90 | - | | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 41 | 7 | 16 | 5 | 57 | 9 | | | | | | | |
| 4 | 23 | 62 | 5 | 22 | - | - | - | - | - | - | 27 | 10 | 12 | 8 | 39 | 13 | | | | | | | |
| 4 | 30 | 62 | 5 | 25 | - | - | - | - | - | - | 6 | 7 | 16 | 9 | 22 | 12 | | | | | | | |
| 5 | 7 | 62 | 6 | 8 | - | - | - | - | - | - | 50 | 5 | 68 | 7 | 118 | 9 | | | | | | | |
| 5 | 14 | 62 | 6 | 22 | 0 | 0 | 1 | 1 | 1 | 1 | 5 | 7 | 14 | 9 | 19 | 11 | | | | | | | |
| 5 | 21 | 62 | 6 | 28 | - | - | - | - | - | - | 0 | 6 | 6 | 8 | 6 | 10 | | | | | | | |
| 5 | 28 | 62 | 6 | 29 | - | - | - | - | - | - | 21 | 4 | 23 | 4 | 44 | 6 | | | | | | | |
| 6 | 4 | 62 | 7 | 3 | - | - | - | - | - | - | 6 | 5 | 17 | 7 | 23 | 9 | | | | | | | |
| 6 | 11 | 62 | 7 | 9 | 0 | 1 | 0 | 1 | 0 | 1 | 24 | 7 | 34 | 9 | 58 | 11 | | | | | | | |
| 6 | 18 | 62 | 7 | 13 | - | - | - | - | - | - | 16 | 7 | 23 | 5 | 39 | 9 | | | | | | | |
| 6 | 25 | 62 | 7 | 20 | - | - | - | - | - | - | 7 | 3 | 21 | 4 | 28 | 5 | | | | | | | |
| 8 | 6 | 62 | 8 | 23 | - | - | - | - | - | - | 21 | 6 | 19 | 7 | 40 | 9 | | | | | | | |
| 8 | 13 | 62 | 8 | 23 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 5 | 27 | 8 | 33 | 9 | | | | | | | |
| 8 | 20 | 62 | 9 | 5 | - | - | - | - | - | - | 5 | 5 | 22 | 8 | 27 | 9 | | | | | | | |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER AT

EVANSVILLE, INDIANA 36

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 9 | 4 | 62 | 9 | 28 | - | - | - | - | - | - | 2 | 5 | 20 | 7 | 22 | 9 | | | | | | |
| 9 | 10 | 62 | 9 | 27 | 0 | 1 | 3 | 2 | 3 | 2 | 3 | 7 | 87 | 11 | 90 | 13 | | | | | | |
| 9 | 17 | 62 | 10 | 9 | - | - | - | - | - | - | 8 | 7 | 19 | 10 | 27 | 12 | | | | | | |
| 9 | 24 | 62 | 10 | 16 | - | - | - | - | - | - | 7 | 6 | 18 | 8 | 25 | 10 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** INDIANA
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.
**STATION LOCATION** OHIO RIVER AT
EVANSVILLE, INDIANA 36

| DATE OF SAMPLE | | | ALGAE (Number per milliliter) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 4100 | 190 | 770 | 1530 | 20 | 210 | 0 | 1160 | 210 | 120 | 20 | 31 | 3 | 12 | 3 | 71 | 2 | 69 | 2 | 51 | 1 | 24 | 1 | 68 | 1 | 91 | 1 | | | | |
| 10 | 16 | 61 | 5900 | 120 | 930 | 2570 | 0 | 410 | 210 | 1350 | 290 | 120 | 40 | 31 | 3 | 69 | 3 | 16 | 2 | 12 | 2 | 38 | 2 | 35 | 2 | 51 | 2 | 68 | 2 | 60 | 1 | 92 | 1 |
| 11 | 6 | 61 | 4100 | 20 | 40 | 1220 | 0 | 720 | 40 | 1720 | 370 | 210 | 150 | 71 | 4 | 69 | 3 | 51 | 2 | 68 | 2 | 38 | 1 | 35 | 1 | 31 | 1 | 92 | 1 | | | | |
| 11 | 20 | 61 | 1900 | 0 | 0 | 390 | 20 | 100 | 40 | 1160 | 150 | 170 | 80 | 69 | 3 | 71 | 1 | 24 | 1 | | | | | | | | | | | | | | |
| 12 | 5 | 61 | 2400 | 0 | 0 | 150 | 0 | 60 | 0 | 1820 | 350 | 460 | 350 | 68 | 4 | 69 | 2 | 92 | 1 | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 300 | 0 | 0 | 90 | 0 | 20 | 0 | 50 | 90 | 0 | 50 | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 1500 | 0 | 20 | 20 | 0 | 20 | 50 | 560 | 830 | 50 | 0 | 69 | 2 | 92 | 1 | 68 | 1 | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 600 | 0 | 0 | 0 | 0 | 0 | 0 | 310 | 290 | 290 | 1030 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 900 | 0 | 0 | 20 | 0 | 20 | 0 | 160 | 650 | 90 | 230 | 82 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 600 | 0 | 0 | 0 | 20 | 50 | 0 | 180 | 320 | 50 | 140 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 320 | 190 | 110 | 150 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 270 | 0 | 110 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 800 | 0 | 0 | 0 | 0 | 80 | 20 | 230 | 440 | 60 | 40 | | | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 1800 | 0 | 0 | 70 | 0 | 160 | 20 | 770 | 790 | 340 | 790 | 88 | 1 | 68 | 1 | 69 | 1 | 91 | 1 | 92 | 1 | 82 | 1 | | | | | | | | |
| 5 | 7 | 62 | 5400 | 0 | 400 | 1140 | 170 | 150 | 60 | 2570 | 890 | 2570 | 870 | 71 | 4 | 68 | 2 | 77 | 2 | 17 | 2 | 69 | 2 | 24 | 2 | 38 | 1 | 25 | 1 | 50 | 1 | | |
| 5 | 21 | 62 | 49000 | 40 | 250 | 3560 | 0 | 2860 | 290 | 37530 | 4510 | 1780 | 170 | 69 | 8 | 92 | 5 | 71 | 5 | 51 | 4 | 68 | 3 | 24 | 3 | 57 | 3 | 82 | 2 | 35 | 2 | 21 | 1 |
| 6 | 4 | 62 | 13400 | 40 | 680 | 2030 | * | 80 | 40 | 6160 | 2950 | 7390 | 2800 | 69 | 5 | 92 | 5 | 50 | 4 | 71 | 4 | 68 | 4 | 17 | 2 | 24 | 2 | 16 | 1 | 25 | 1 | 32 | 1 |
| 6 | 18 | 62 | 17200 | 12070 | 0 | 1430 | 0 | 0 | 0 | 2410 | 1270 | 2070 | 1350 | 2 | 7 | 69 | 4 | 92 | 3 | 40 | 2 | 35 | 2 | 24 | 1 | | | | | | | | |
| 7 | 2 | 62 | 29900 | 1220 | 130 | 19830 | 170 | 420 | 0 | 6120 | 2030 | 1180 | 1010 | 24 | 7 | 69 | 6 | 26 | 5 | 84 | 4 | 38 | 3 | 31 | 3 | 2 | 3 | 30 | 2 | 3 | 2 | | |
| 7 | 16 | 62 | 10900 | 620 | 40 | 4720 | * | 1280 | 40 | 460 | 870 | 120 | 330 | 24 | 5 | 50 | 5 | 51 | 3 | 92 | 2 | 3 | 2 | 35 | 2 | 69 | 1 | 30 | 1 | | | | |
| 8 | 6 | 62 | 2100 | 0 | 0 | 170 | 0 | 40 | 0 | 1480 | 380 | 760 | 170 | 69 | 3 | 68 | 2 | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 2200 | 80 | 130 | 460 | 320 | 300 | 0 | 680 | 190 | 40 | 130 | 69 | 2 | 51 | 1 | 50 | 1 | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 2800 | 210 | 40 | 300 | 0 | 0 | 0 | 1180 | 1060 | 380 | 630 | 68 | 2 | 71 | 2 | 87 | 2 | 69 | 1 | 88 | 1 | 2 | 1 | 24 | 1 | | | | | | |
| 9 | 17 | 62 | 500 | 20 | 0 | 210 | 0 | 70 | 70 | 160 | 0 | 20 | 90 | | | | | | | | | | | | | | | | | | | | |
| *6 | 4 | 62 | | | | | 1390 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| *7 | 16 | 62 | | | | | 2900 | | | | | | | | | | | | | | | | | | | | | | | | | | |

NATIONAL WATER QUALITY NETWORK

# PLANKTON POPULATION

**STATE** INDIANA

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER AT

EVANSVILLE, INDIANA 036

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | | | | | | | | | | 20 | 10 | 171 | 11 | 5 | 17 | 4 | 22 | 3 | | | | | 46 | 50 | 4 | 76 | 1 | | | 0 | 0 |
| 10 | 16 | 61 | 56 | 59 | 89 | 19 | 58 | 4 | 82 | 4 | 14 | 0 | 40 | 237 | 17 | 5 | 21 | 4 | 11 | 3 | 22 | 4 | | | 208 | 50 | 5 | 76 | 4 | 53 | 3 | 0 | 0 |
| 11 | 6 | 61 | 56 | 51 | 89 | 19 | 82 | 7 | 92 | 6 | 17 | 0 | 0 | 116 | 11 | 5 | 22 | 2 | | | | | | | 6 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 56 | 87 | 89 | 4 | 57 | 4 | 58 | 2 | 3 | 0 | 0 | 183 | 11 | 5 | 21 | 2 | 18 | 1 | 22 | 1 | 2 | 1 | 2 | | | | | | | 0 | 0 |
| 12 | 5 | 61 | 56 | 76 | 92 | 6 | 58 | 6 | 89 | 4 | 8 | 0 | 0 | 9 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | | | | | | | | | | 160 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 56 | 26 | 47 | 9 | 62 | 8 | 89 | 8 | 49 | 250 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 56 | 34 | 92 | 14 | 62 | 9 | 89 | 7 | 36 | 90 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 36 | 18 | 92 | 15 | 56 | 8 | 26 | 6 | 53 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 56 | 21 | 92 | 20 | 62 | 10 | 36 | 9 | 40 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 92 | 21 | 56 | 13 | 62 | 9 | 50 | 4 | 53 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 47 | 23 | 36 | 9 | 56 | 7 | 89 | 6 | 55 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 36 | 13 | 56 | 8 | 92 | 7 | 86 | 6 | 66 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 82 | 27 | 92 | 11 | 56 | 10 | 86 | 6 | 46 | 60 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 5 | 21 | 62 | 56 | 29 | 89 | 19 | 82 | 15 | 57 | 24 | 13 | 210 | 100 | 317 | 11 | 6 | 17 | 5 | 22 | 3 | 46 | 2 | 2 | 1 | 66 | 50 | 4 | 76 | 4 | | | 0 | 0 |
| 6 | 4 | 62 | 92 | 31 | 56 | 27 | 89 | 17 | 61 | 13 | 12 | 40 | 0 | 12 | 17 | 1 | | | | | | | | | 31 | 76 | 3 | 50 | 1 | | | 0 | 0 |
| 6 | 18 | 62 | 45 | 38 | 56 | 25 | 92 | 24 | 58 | 6 | 7 | 0 | 10 | 114 | 11 | 5 | 17 | 2 | 22 | 1 | | | | | 19 | 50 | 2 | 76 | 2 | 52 | 1 | 0 | 1 |
| 7 | 2 | 62 | 45 | 42 | 56 | 16 | 92 | 15 | 89 | 6 | 21 | 40 | 50 | 571 | 11 | 7 | 2 | 5 | 17 | 5 | 22 | 2 | 46 | 1 | 116 | 76 | 5 | 50 | 3 | 53 | 3 | 0 | 0 |
| 7 | 16 | 62 | 56 | 46 | 89 | 16 | 58 | 6 | 82 | 6 | 26 | 0 | 40 | 45 | 11 | 3 | 2 | 1 | | | | | | | 21 | 50 | 2 | 76 | 2 | 53 | 1 | 0 | 0 |
| 8 | 6 | 62 | 56 | 48 | 57 | 17 | 26 | 16 | 58 | 10 | 9 | 0 | 0 | 102 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 8 | 20 | 62 | 58 | 36 | 56 | 29 | 89 | 7 | 27 | 7 | 21 | 0 | 0 | 351 | 22 | 6 | 17 | 2 | 21 | 2 | 46 | 1 | | | 59 | 50 | 5 | 77 | 1 | | | 0 | 1 |
| 9 | 4 | 62 | 56 | 22 | 58 | 13 | 26 | 10 | 82 | 9 | 46 | 0 | 0 | 77 | 22 | 3 | 17 | 3 | 15 | 2 | 11 | 1 | | | 90 | 51 | 5 | 50 | 4 | 77 | 3 | 0 | 0 |
| 9 | 17 | 62 | 26 | 44 | 56 | 24 | 82 | 9 | 47 | 2 | 21 | 0 | 0 | 113 | 21 | 4 | 2 | 2 | 22 | 2 | 16 | 2 | 11 | 1 | 60 | 50 | 4 | 51 | 4 | 52 | 1 | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

**RECOVERED BY CARBON FILTER TECHNIQUE**

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** INDIANA

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TR

**STATION LOCATION** OHIO RIVER AT
EVANSVILLE, INDIANA

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES |
| 1 | 11 | 62 | 1 | 20 | 5040 | 128 | 42 | 86 | 1 | 9 | 21 | 4 | 3 | 12 | 2 | 4 | 2 | 0 |
| 2 | 1 | 62 | 2 | 9 | 5030 | 146 | 46 | 100 | 1 | 11 | 21 | 4 | 3 | 13 | 1 | 5 | 3 | 1 |
| 3 | 1 | 62 | 3 | 15 | 5368 | 121 | 44 | 77 | 0 | 9 | 20 | 4 | 3 | 13 | 0 | 5 | 2 | 1 |
| 4 | 2 | 62 | 4 | 11 | 5419 | 126 | 48 | 78 | 2 | 11 | 18 | 4 | 2 | 10 | 2 | 6 | 3 | 1 |
| 5 | 3 | 62 | 5 | 11 | 5009 | 172 | 82 | 90 | 3 | 18 | 26 | 3 | 3 | 19 | 1 | 10 | 9 | 1 |
| 6 | 4 | 62 | 8 | 6 | 3608 | 190 | 68 | 122 | 0 | 12 | 31 | 5 | 4 | 22 | 0 | 9 | 3 | 1 |
| 8 | 6 | 62 | 8 | 16 | 5091 | 178 | 88 | 90 | 3 | 22 | 29 | 1 | 2 | 23 | 3 | 13 | 9 | 3 |
| 9 | 11 | 62 | 9 | 20 | 5426 | 170 | 78 | 92 | 1 | 13 | 32 | 2 | 2 | 26 | 2 | 10 | 7 | 1 |

**MINOR BASIN** OHIO RIVER–MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER AT

EVANSVILLE, INDIANA

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 21.5 | - | 8.5 | - | - | - | - | - | 27 | 110 | 160 | - | 11 | 130 | .0 | - | 300 |
| 10 | 9 | 61 | 22.8 | - | 8.7 | - | - | - | - | - | 30 | 86 | 171 | 5 | 11 | 93 | .0 | - | 200 |
| 10 | 16 | 61 | 21.6 | - | 8.4 | - | - | - | - | - | 24 | 93 | 171 | - | 10 | 88 | .0 | - | 2000 |
| 10 | 23 | 61 | 21.5 | - | 7.8 | - | - | - | - | - | 37 | 97 | 185 | - | 11 | 118 | .0 | - | 5000 |
| 10 | 30 | 61 | 20.0 | - | 7.7 | - | - | - | - | - | 44 | 89 | 200 | - | 10 | 130 | .1 | - | 2800 |
| 11 | 6 | 61 | 16.4 | 8.0 | 7.6 | 2.7 | 6 | - | - | - | 59 | 86 | 200 | - | 12 | 130 | .1 | - | 2800 |
| 11 | 13 | 61 | 19.5 | 10.0 | 7.4 | - | 24 | 4.6 | - | .4 | 64 | 73 | 148 | - | 10 | 98 | .1 | - | 1100 |
| 11 | 20 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 8400 |
| 11 | 22 | 61 | 17.0 | 10.2 | 7.5 | - | 25 | - | - | .4 | 68 | 74 | 154 | - | 21 | 98 | .2 | - | - |
| 11 | 27 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2900 |
| 11 | 29 | 61 | 16.7 | 9.0 | 7.4 | 4.8 | 22 | .8 | .0 | .8 | 52 | 59 | 180 | - | 79 | 130 | .2 | - | - |
| 12 | 6 | 61 | 16.7 | 10.2 | 7.2 | 2.8 | 25 | - | - | .8 | 38 | 49 | 161 | - | 34 | 113 | .2 | - | - |
| 12 | 12 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 14000 |
| 12 | 13 | 61 | 14.0 | 10.8 | 7.2 | 7.3 | 26 | 7.8 | - | .6 | 31 | 61 | 147 | 15 | 81 | 90 | .2 | - | - |
| 12 | 18 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 700 |
| 12 | 20 | 61 | 9.5 | 10.3 | 6.8 | - | 7 | 6.2 | - | .2 | 34 | 47 | 125 | 15 | 148 | 70 | .4 | - | - |
| 12 | 27 | 61 | 7.5 | - | 6.8 | - | - | - | - | - | 18 | 35 | 116 | - | 320 | 42 | .3 | - | - |
| 1 | 3 | 62 | 5.1 | - | 7.2 | - | - | - | - | - | 19 | 47 | 146 | - | 130 | 57 | .2 | - | - |
| 1 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2100 |
| 1 | 9 | 62 | 6.0 | 12.8 | 7.3 | - | 18 | 1.2 | - | .6 | 21 | 37 | 115 | - | 153 | - | - | - | - |
| 1 | 10 | 62 | 6.8 | 12.0 | 7.4 | 6.2 | 27 | 1.6 | - | .6 | 19 | 64 | 125 | 20 | 125 | 65 | .2 | - | - |
| 1 | 15 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 7200 |
| 1 | 17 | 62 | 6.0 | 11.6 | 7.2 | - | 34 | - | - | .8 | 19 | 52 | 134 | 30 | 360 | 60 | .2 | - | - |
| 1 | 22 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 9000 |
| 1 | 24 | 62 | 12.0 | 12.7 | 7.3 | 5.8 | 35 | 1.4 | 3.0 | .5 | 19 | 57 | 134 | 25 | 250 | 71 | .3 | - | - |
| 1 | 29 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 9600 |
| 1 | 31 | 62 | 9.0 | 10.7 | 7.1 | 5.0 | 36 | 1.6 | 2.8 | .6 | 19 | 55 | 118 | 25 | 330 | 78 | .4 | - | - |
| 2 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5500 |
| 2 | 7 | 62 | 7.0 | 11.4 | 7.2 | 5.9 | 24 | 1.1 | 2.7 | .4 | 22 | 62 | 145 | 30 | 250 | 57 | .6 | - | - |
| 2 | 13 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 6300 |
| 2 | 15 | 62 | 7.0 | 11.8 | 7.3 | 6.4 | 31 | 1.4 | - | .7 | 18 | 63 | 142 | 15 | 120 | 57 | .3 | - | - |
| 2 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1900 |
| 2 | 21 | 62 | 8.0 | 11.4 | 7.2 | 6.5 | 26 | 1.2 | 2.5 | 1.2 | 19 | 64 | 145 | 20 | 120 | 73 | .3 | - | - |
| 2 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3700 |
| 2 | 28 | 62 | 5.0 | 10.7 | 7.2 | 6.3 | 17 | 1.4 | 2.8 | .4 | 17 | 69 | 129 | 40 | 600 | 59 | - | - | - |
| 3 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3300 |
| 3 | 7 | 62 | 9.0 | 10.5 | 7.2 | 6.0 | - | 1.1 | - | - | 10 | 48 | 77 | 40 | 370 | 35 | - | - | - |
| 3 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1500 |
| 3 | 14 | 62 | 8.0 | 11.3 | 7.2 | 3.3 | - | .9 | - | .5 | 11 | 70 | 122 | 20 | 120 | 51 | - | - | - |

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER AT
EVANSVILLE, INDIANA

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 3 | 15 | 62 | - | - | - | - | 10 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5700 |
| 3 | 21 | 62 | 9.0 | 10.7 | 7.2 | 4.2 | - | .9 | - | .3 | 14 | 55 | 120 | 20 | 120 | 59 | - | - | - |
| 3 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 14000 |
| 3 | 29 | 62 | 13.0 | 9.7 | 7.2 | 6.2 | - | 1.1 | - | .2 | 13 | 56 | 108 | 30 | 170 | 59 | .2 | - | - |
| 4 | 4 | 62 | 12.0 | 10.2 | 7.3 | 3.7 | - | 1.9 | - | .2 | 11 | 57 | 123 | 30 | 150 | 78 | - | - | - |
| 4 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 300 |
| 4 | 11 | 62 | - | - | - | - | 10 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 50 | - | - | 850 |
| 4 | 18 | 62 | 12.0 | 9.1 | 7.2 | 3.8 | - | 1.5 | - | .2 | 10 | 44 | 117 | 15 | 115 | 68 | - | - | - |
| 4 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 55 | - | - | 700 |
| 4 | 25 | 62 | 12.0 | 9.8 | 7.2 | 3.6 | - | 1.9 | - | .3 | 12 | 47 | 117 | 20 | 125 | 55 | - | - | - |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3500 |
| 5 | 3 | 62 | 17.0 | 8.3 | 7.3 | 4.1 | - | 1.9 | - | .5 | 14 | 60 | 138 | 30 | 71 | 82 | - | - | - |
| 5 | 7 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3500 |
| 5 | 11 | 62 | - | - | - | - | 7 | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 14 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2500 |
| 5 | 16 | 62 | 23.0 | 8.4 | 7.3 | 4.0 | - | 2.0 | - | .4 | 20 | 75 | 142 | 35 | 25 | 90 | .1 | - | - |
| 5 | 21 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2200 |
| 5 | 23 | 62 | 24.0 | 10.2 | 8.0 | 3.7 | - | 1.0 | - | .4 | 21 | 85 | 164 | 15 | 39 | 95 | .2 | - | - |
| 5 | 28 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *330 |
| 6 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 92 | - | - | 7700 |
| 6 | 6 | 62 | 24.0 | 8.6 | 7.5 | 3.5 | - | 1.2 | - | .4 | 25 | 82 | 163 | - | 34 | 98 | .5 | - | - |
| 6 | 11 | 62 | - | - | 7.6 | - | - | - | - | - | - | 86 | 152 | 5 | *25 | 75 | .0 | 250 | 20000 |
| 6 | 13 | 62 | 24.0 | 7.3 | 7.5 | - | - | - | - | .3 | 25 | 80 | 150 | 20 | 120 | 113 | .4 | - | - |
| 6 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 68 | - | - | - |
| 6 | 21 | 62 | 25.0 | 8.6 | 7.5 | - | - | 1.5 | - | .1 | 26 | 92 | 163 | 20 | 20 | 113 | .8 | - | - |
| 6 | 25 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3100 |
| 7 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 7 | 19 | 62 | 27.0 | 5.5 | 7.5 | - | - | - | - | - | 33 | 57 | 138 | 15 | 62 | 95 | .2 | - | - |
| 8 | 1 | 62 | 26.0 | 7.7 | 7.5 | 1.0 | - | 1.9 | - | - | 16 | 78 | 123 | - | 57 | 98 | .3 | - | - |
| 8 | 6 | 62 | - | - | 8.0 | - | - | - | - | - | 14 | 80 | 124 | 5 | 85 | 63 | .0 | - | - |
| 8 | 9 | 62 | 27.0 | 8.6 | 7.7 | 2.0 | 24 | - | - | .2 | 22 | 79 | 136 | - | 20 | 98 | .3 | - | - |
| 8 | 15 | 62 | 25.0 | 11.3 | 8.6 | 2.2 | 27 | .3 | - | .1 | 30 | 76 | 150 | - | 18 | 98 | .1 | - | - |
| 8 | 20 | 62 | - | - | - | - | - | - | - | - | 29 | 80 | 148 | 5 | 25 | 67 | - | - | - |
| 8 | 23 | 62 | 26.0 | 10.2 | 8.6 | 2.1 | 27 | .8 | - | .2 | 33 | 76 | 150 | - | 20 | 105 | .3 | - | - |
| 8 | 29 | 62 | 26.0 | 4.9 | 8.5 | 1.8 | 27 | - | - | .1 | 33 | 72 | 150 | - | 17 | 98 | .4 | - | - |
| 9 | 6 | 62 | 26.0 | 10.3 | 7.5 | - | - | - | - | - | 31 | 73 | 147 | - | 20 | 95 | .5 | - | - |
| 9 | 12 | 62 | 24.0 | 8.1 | 7.6 | - | - | - | - | - | 40 | 73 | 148 | - | 22 | 98 | .5 | - | - |

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER AT
EVANSVILLE, INDIANA 36

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | 33 | 60 | 152 | 5 | 25 | 102 | - | - | - |
| 9 | 19 | 62 | 23.0 | - | - | - | - | - | - | - | 41 | 62 | 150 | - | 13 | - | - | - | - |
| 9 | 26 | 62 | 20.0 | 10.4 | 7.8 | 2.2 | 27 | .2 | - | .8 | 42 | 68 | 147 | - | 11 | 105 | .1 | - | - |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Evansville, Indiana
Operated by U.S. Geological Survey

MAJOR BASIN Ohio River

MINOR BASIN Ohio River-Main Stem and Minor Trib.

STATION LOCATION Ohio River at
Evansville, Indiana

| October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|

DATA NOT AVAILABLE AT PRESENT TIME

# ORGANIC CHEMICALS
RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER AT
LOUISVILLE, KENTUCKY 84

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 10 | 3 | 61 | 10 | 18 | 2986 | 423 | 117 | 306 | 4 | 21 | 48 | 3 | 3 | 40 | 2 | 18 | 11 | 3 | 12 |
| 11 | 6 | 61 | 11 | 14 | 5320 | 287 | 106 | 181 | 1 | 14 | 48 | 2 | 2 | 39 | 5 | 12 | 7 | 3 | 21 |
| 12 | 5 | 61 | 12 | 13 | 5087 | 196 | 58 | 138 | 3 | 13 | 15 | 3 | 2 | 10 | 0 | 4 | 3 | 2 | 18 |
| 1 | 2 | 62 | 1 | 8 | 4250 | 134 | 42 | 92 | 2 | 10 | 19 | 4 | 2 | 13 | 0 | 4 | 2 | 0 | 5 |
| 2 | 6 | 62 | 2 | 16 | 4984 | 114 | 35 | 79 | 1 | 6 | 18 | 4 | 2 | 11 | 1 | 4 | 1 | 1 | 4 |
| 3 | 6 | 62 | 3 | 16 | 4709 | 147 | 68 | 79 | 3 | 15 | 21 | 2 | 2 | 16 | 1 | 8 | 8 | 1 | 12 |
| 4 | 3 | 62 | 4 | 16 | 3977 | 192 | 74 | 118 | 5 | 16 | 25 | 5 | 4 | 16 | 0 | 9 | 7 | 1 | 11 |
| 5 | 1 | 62 | 5 | 11 | 5083 | 169 | 76 | 93 | 3 | 19 | 24 | 3 | 2 | 18 | 1 | 8 | 8 | 1 | 13 |
| 6 | 5 | 62 | 6 | 19 | 3749 | 201 | 84 | 117 | 3 | 22 | 26 | 3 | 2 | 19 | 2 | 9 | 8 | 2 | 14 |
| 7 | 3 | 62 | 7 | 16 | 5073 | 243 | 135 | 108 | 5 | 31 | 40 | 2 | 2 | 32 | 4 | 16 | 14 | 3 | 26 |
| 8 | 7 | 62 | 8 | 15 | 5216 | 248 | 114 | 134 | 3 | 30 | 30 | 2 | 1 | 25 | 2 | 14 | 15 | 2 | 20 |
| 9 | 4 | 62 | 9 | 14 | 5081 | 280 | 107 | 173 | 2 | 23 | 35 | 2 | 1 | 29 | 3 | 12 | 12 | 4 | 19 |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER AT
LOUISVILLE, KENTUCKY 84

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 3 | 61 | 10 | 11 | – | – | – | – | – | – | 4 | 4 | 10 | 6 | 14 | 7 | | | | | | |
| 10 | 10 | 61 | 10 | 30 | 0 | 0 | 2 | 2 | 2 | 2 | 1 | 4 | 13 | 6 | 14 | 7 | | | | | | |
| 10 | 17 | 61 | 10 | 26 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 8 | 9 | 10 | 9 | 13 | | | | | | |
| 10 | 24 | 61 | 11 | 1 | 1 | 1 | 0 | 2 | 1 | 2 | 9 | 9 | 19 | 12 | 28 | 15 | | | | | | |
| 10 | 31 | 61 | 11 | 7 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 8 | 14 | 10 | 22 | 13 | | | | | | |
| 11 | 6 | 61 | 11 | 15 | 0 | 1 | 0 | 2 | 0 | 2 | 22 | 9 | 4 | 10 | 26 | 13 | | | | | | |
| 11 | 14 | 61 | 11 | 24 | 1 | 1 | 1 | 1 | 2 | 1 | 0 | 5 | 13 | 8 | 13 | 9 | | | | | | |
| 11 | 21 | 61 | 11 | 30 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 4 | 23 | 6 | 27 | 7 | | | | | | |
| 11 | 28 | 61 | 12 | 6 | 1 | 2 | 0 | 2 | 1 | 3 | 77 | 13 | 31 | 14 | 108 | 19 | | | | | | |
| 12 | 5 | 61 | 12 | 11 | 0 | 0 | 0 | 1 | 0 | 1 | 8 | 6 | 22 | 7 | 30 | 9 | | | | | | |
| 12 | 12 | 61 | 12 | 18 | 0 | 1 | 0 | 1 | 0 | 1 | 15 | 5 | 14 | 6 | 29 | 8 | | | | | | |
| 12 | 18 | 61 | 12 | 26 | 1 | 1 | 0 | 1 | 1 | 1 | 25 | 6 | 23 | 5 | 48 | 8 | | | | | | |
| 12 | 26 | 61 | 1 | 3 | 4 | 2 | 0 | 1 | 4 | 2 | 24 | 7 | 11 | 5 | 35 | 9 | | | | | | |
| 1 | 2 | 62 | 1 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 4 | 9 | 5 | 15 | 6 | | | | | | |
| 1 | 8 | 62 | 1 | 19 | 1 | 1 | 0 | 1 | 1 | 1 | 23 | 5 | 21 | 6 | 44 | 8 | | | | | | |
| 1 | 16 | 62 | 1 | 24 | 1 | 1 | 0 | 1 | 1 | 1 | 49 | 8 | 27 | 7 | 76 | 11 | | | | | | |
| 1 | 23 | 62 | 1 | 30 | 2 | 2 | 0 | 1 | 2 | 2 | 83 | 8 | 29 | 6 | 112 | 10 | | | | | | |
| 1 | 30 | 62 | 2 | 8 | 1 | 1 | 0 | 1 | 1 | 1 | 25 | 7 | 21 | 5 | 46 | 9 | | | | | | |
| 2 | 6 | 62 | 2 | 14 | 1 | 1 | 1 | 1 | 2 | 1 | 21 | 6 | 12 | 6 | 33 | 8 | | | | | | |
| 2 | 13 | 62 | 2 | 20 | 1 | 1 | 0 | 1 | 1 | 1 | 25 | 4 | 19 | 5 | 44 | 6 | | | | | | |
| 2 | 20 | 62 | 3 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 26 | 5 | 17 | 5 | 43 | 7 | | | | | | |
| 2 | 27 | 62 | 3 | 9 | 7 | 7 | 0 | 1 | 7 | 7 | 110 | 18 | 33 | 6 | 143 | 19 | | | | | | |
| 3 | 6 | 62 | 3 | 16 | 4 | 3 | 0 | 1 | 4 | 3 | 65 | 9 | 19 | 5 | 84 | 10 | | | | | | |
| 3 | 13 | 62 | 3 | 23 | 2 | 1 | 1 | 1 | 3 | 1 | 50 | 7 | 21 | 5 | 71 | 9 | | | | | | |
| 3 | 20 | 62 | 3 | 30 | 4 | 2 | 0 | 1 | 4 | 2 | 37 | 7 | 16 | 5 | 53 | 9 | | | | | | |
| 3 | 27 | 62 | 4 | 4 | 6 | 4 | 0 | 1 | 6 | 4 | 99 | 9 | 15 | 5 | 114 | 10 | | | | | | |
| 4 | 3 | 62 | 4 | 16 | 1 | 1 | 0 | 0 | 1 | 1 | 100 | 9 | 21 | 5 | 121 | 10 | | | | | | |
| 4 | 10 | 62 | 4 | 23 | 2 | 1 | 1 | 1 | 3 | 1 | 27 | 6 | 13 | 5 | 40 | 7 | | | | | | |
| 4 | 17 | 62 | 4 | 30 | 6 | 3 | 0 | 2 | 6 | 4 | 66 | 9 | 18 | 5 | 84 | 10 | | | | | | |
| 4 | 24 | 62 | 5 | 24 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 6 | 12 | 6 | 18 | 8 | | | | | | |
| 5 | 1 | 62 | 6 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 6 | 97 | 8 | 168 | 10 | | | | | | |
| 5 | 8 | 62 | 6 | 8 | 0 | 0 | 2 | 1 | 2 | 1 | 8 | 5 | 25 | 7 | 33 | 9 | | | | | | |
| 5 | 15 | 62 | 7 | 19 | 0 | 1 | 0 | 1 | 0 | 1 | 14 | 10 | 15 | 8 | 29 | 13 | | | | | | |
| 5 | 22 | 62 | 6 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 15 | 5 | 15 | 6 | | | | | | |
| 5 | 29 | 62 | 6 | 29 | 1 | 1 | 0 | 1 | 1 | 1 | 8 | 5 | 23 | 7 | 31 | 9 | | | | | | |
| 6 | 5 | 62 | 7 | 5 | 1 | 1 | 0 | 1 | 1 | 1 | 7 | 6 | 26 | 8 | 33 | 10 | | | | | | |
| 6 | 12 | 62 | 7 | 10 | 1 | 1 | 0 | 0 | 1 | 1 | 8 | 6 | 19 | 8 | 27 | 10 | | | | | | |
| 6 | 19 | 62 | 7 | 13 | 0 | 1 | 1 | 1 | 1 | 1 | 8 | 4 | 16 | 5 | 24 | 6 | | | | | | |
| 6 | 26 | 62 | 7 | 23 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 4 | 18 | 6 | 19 | 7 | | | | | | |
| 7 | 3 | 62 | 7 | 31 | – | – | – | – | – | – | 0 | 16 | 17 | 14 | 17 | 21 | | | | | | |
| 7 | 10 | 62 | 8 | 6 | – | – | – | – | – | – | 8 | 7 | 14 | 9 | 22 | 11 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 7 | 17 | 62 | 8 | 20 | 2 | 2 | 0 | 1 | 2 | 2 | 39 | 4 | 32 | 4 | 71 | 6 | | | | | | |
| 7 | 24 | 62 | 8 | 3 | - | - | - | - | - | - | 15 | 3 | 27 | 4 | 42 | 5 | | | | | | |
| 7 | 31 | 62 | 8 | 21 | - | - | - | - | - | - | 18 | 11 | 34 | 13 | 52 | 17 | | | | | | |
| 8 | 7 | 62 | 8 | 28 | - | - | - | - | - | - | 2 | 5 | 16 | 7 | 18 | 9 | | | | | | |
| 8 | 14 | 62 | 8 | 31 | - | - | - | - | - | - | 7 | 6 | 14 | 8 | 21 | 10 | | | | | | |
| 8 | 21 | 62 | 9 | 7 | 0 | 1 | 0 | 0 | 0 | 1 | 5 | 10 | 15 | 7 | 20 | 12 | | | | | | |
| 8 | 28 | 62 | 9 | 27 | - | - | - | - | - | - | 7 | 11 | 14 | 7 | 21 | 13 | | | | | | |
| 9 | 4 | 62 | 9 | 27 | - | - | - | - | - | - | 6 | 5 | 20 | 8 | 26 | 9 | | | | | | |
| 9 | 11 | 62 | 10 | 12 | - | - | - | - | - | - | 5 | 6 | 29 | 10 | 34 | 12 | | | | | | |
| 9 | 18 | 62 | 10 | 11 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 5 | 13 | 8 | 16 | 9 | | | | | | |
| 9 | 25 | 62 | 10 | 18 | - | - | - | - | - | - | 2 | 6 | 11 | 8 | 13 | 10 | | | | | | |

**STATION LOCATION** OHIO RIVER AT

LOUISVILLE, KENTUCKY 84

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 3 | 61 | 2600 | 220 | 290 | 1300 | 0 | 0 | 20 | 670 | 90 | 470 | 110 | 68 | 2 | 44 | 2 | 15 | 1 | 35 | 1 | 2 | 1 | 38 | 1 | 69 | 1 | 71 | 1 | | | | |
| 10 | 17 | 61 | 1500 | 0 | 100 | 400 | 210 | 40 | 0 | 640 | 80 | 20 | 80 | 69 | 3 | 50 | 1 | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 3100 | 20 | 0 | 420 | 0 | 480 | 20 | 2010 | 150 | 100 | 40 | 69 | 4 | 68 | 2 | | | | | | | | | | | | | | | | |
| 11 | 21 | 61 | 2400 | 0 | 40 | 330 | 0 | 270 | 0 | 1350 | 370 | 210 | 40 | 69 | 2 | 92 | 1 | | | | | | | | | | | | | | | | |
| 12 | 5 | 61 | 3100 | 50 | 0 | 450 | 0 | 250 | 70 | 1530 | 720 | 430 | 680 | 69 | 4 | 38 | 2 | 92 | 2 | 51 | 1 | | | | | | | | | | | | |
| 12 | 18 | 61 | 1800 | 0 | 0 | 20 | 20 | 0 | 0 | 950 | 810 | 120 | 330 | 69 | 3 | 68 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 1200 | 0 | 0 | 0 | 0 | 230 | 0 | 380 | 560 | 20 | 70 | 92 | 1 | 68 | 1 | 69 | 1 | 51 | 1 | | | | | | | | | | | | |
| 1 | 16 | 62 | 600 | 0 | 0 | 20 | 0 | 0 | 0 | 290 | 270 | 270 | 600 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 6 | 62 | 600 | 0 | 0 | 70 | 0 | 50 | 0 | 290 | 200 | 490 | 400 | 68 | 2 | | | | | | | | | | | | | | | | | | |
| 2 | 20 | 62 | 600 | 0 | 0 | 40 | 0 | 100 | 80 | 190 | 230 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 3 | 6 | 62 | 800 | 0 | 20 | 0 | 0 | 0 | 0 | 170 | 640 | 20 | 100 | 92 | 2 | | | | | | | | | | | | | | | | | | |
| 3 | 20 | 62 | 700 | 0 | 0 | 20 | 0 | 60 | 0 | 150 | 480 | 0 | 170 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 3 | 62 | 800 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 730 | 0 | 170 | 92 | 1 | 82 | 1 | | | | | | | | | | | | | | | | |
| 4 | 17 | 62 | 400 | 0 | 0 | 20 | 0 | 0 | 0 | 110 | 310 | 110 | 450 | | | | | | | | | | | | | | | | | | | | |
| 5 | 1 | 62 | 1600 | 0 | 0 | 170 | 0 | 130 | 20 | 850 | 460 | 1430 | 100 | 71 | 2 | 68 | 1 | 92 | 1 | 69 | 1 | | | | | | | | | | | | |
| 5 | 15 | 62 | 3000 | 0 | 150 | 1010 | 40 | 490 | 0 | 870 | 490 | 610 | 210 | 24 | 2 | 71 | 2 | 57 | 2 | 38 | 1 | 69 | 1 | 92 | 1 | | | | | | | | |
| 6 | 5 | 62 | 5200 | 0 | 210 | 1480 | 250 | 0 | 0 | 2320 | 930 | 2070 | 930 | 92 | 6 | 68 | 3 | 24 | 3 | 71 | 3 | 69 | 2 | 50 | 1 | 40 | 1 | 17 | 1 | | | | |
| 6 | 19 | 62 | 20000 | 80 | 0 | 620 | 120 | 910 | 170 | 15820 | 2320 | 7580 | 540 | 68 | 6 | 69 | 6 | 92 | 4 | 71 | 4 | 51 | 3 | 38 | 1 | 31 | 1 | | | | | | |
| 7 | 3 | 62 | 700 | 0 | 0 | 40 | 0 | 0 | 0 | 80 | 560 | 40 | 120 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 17 | 62 | 7400 | 60 | 0 | 500 | 0 | 0 | 40 | 5220 | 1620 | 1740 | 540 | 68 | 5 | 92 | 4 | 88 | 1 | 39 | 1 | 71 | 1 | | | | | | | | | | |
| 8 | 7 | 62 | 1900 | 0 | 110 | 110 | 700 | 0 | 0 | 720 | 250 | 420 | 250 | 50 | 3 | 69 | 3 | | | | | | | | | | | | | | | | |
| 8 | 21 | 62 | 1800 | 40 | 0 | 20 | 0 | 110 | 0 | 1140 | 510 | 460 | 40 | 69 | 3 | 92 | 2 | 68 | 1 | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 600 | 150 | 0 | 40 | 0 | 0 | 0 | 300 | 80 | 0 | 80 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 9 | 18 | 62 | 300 | 0 | 0 | 0 | 0 | 0 | 60 | 210 | 40 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |

STATION LOCATION OHIO RIVER AT

LOUISVILLE, KENTUCKY 084

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 3 | 61 | 56 | 40 | 26 | 30 | 82 | 11 | 58 | 4 | 15 | 20 | 0 | 203 | 11 | 5 | 17 | 3 | | | | | | | 112 | 50 | 5 | 76 | 4 | 54 | 3 | 0 | 0 |
| 10 | 17 | 61 | 56 | 76 | 89 | 6 | 26 | 6 | 92 | 4 | 8 | 0 | 0 | 344 | 11 | 5 | 22 | 5 | 15 | 3 | 18 | 1 | | | 39 | 51 | 4 | 53 | 3 | | | 2 | 0 |
| 11 | 6 | 61 | 56 | 57 | 26 | 12 | 89 | 11 | 58 | 11 | 9 | 0 | 0 | 139 | 11 | 5 | 2 | 1 | 17 | 1 | 18 | 1 | | | 1 | | | | | | | 0 | 0 |
| 11 | 21 | 61 | 56 | 86 | 89 | 8 | 57 | 3 | 92 | 3 | 10 | 0 | 0 | 68 | 11 | 4 | | | | | | | | | 4 | 51 | 1 | | | | | 0 | 0 |
| 12 | 5 | 61 | 56 | 80 | 89 | 3 | 57 | 3 | 58 | 3 | 11 | 230 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 56 | 52 | 89 | 10 | 62 | 6 | 58 | 4 | 28 | 0 | 0 | 7 | 15 | 1 | | | | | | | | | 1 | | | | | | | 5 | 0 |
| 1 | 2 | 62 | 56 | 21 | 92 | 13 | 62 | 9 | 26 | 6 | 51 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 16 | 62 | 56 | 34 | 26 | 9 | 89 | 7 | 36 | 6 | 44 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 6 | 62 | 26 | 25 | 92 | 25 | 36 | 11 | 56 | 9 | 30 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 20 | 62 | 92 | 15 | 36 | 13 | 93 | 12 | 51 | 11 | 49 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 6 | 62 | 92 | 25 | 62 | 10 | 26 | 8 | 56 | 6 | 51 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 20 | 62 | 92 | 10 | 26 | 9 | 62 | 7 | 65 | 7 | 67 | 40 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 3 | 62 | 92 | 19 | 56 | 18 | 36 | 12 | 86 | 9 | 42 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 17 | 62 | 92 | 25 | 56 | 22 | 86 | 9 | 58 | 4 | 40 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 1 | 62 | 82 | 31 | 92 | 14 | 26 | 8 | 56 | 5 | 42 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 15 | 62 | 82 | 38 | 56 | 11 | 57 | 9 | 92 | 7 | 35 | 0 | 10 | 152 | 11 | 5 | 2 | 2 | 21 | 1 | 17 | 1 | | | 12 | 51 | 1 | 50 | 1 | 76 | 1 | 2 | 0 |
| 6 | 5 | 62 | 92 | 14 | 56 | 14 | 89 | 7 | 45 | 6 | 59 | 0 | 10 | 302 | 17 | 5 | 11 | 5 | 15 | 3 | 22 | 3 | | | 8 | 76 | 2 | | | | | 2 | 1 |
| 6 | 19 | 62 | 56 | 50 | 45 | 21 | 92 | 15 | 26 | 8 | 6 | 120 | 0 | 680 | 11 | 7 | 22 | 5 | 17 | 5 | 15 | 4 | 2 | 3 | 23 | 50 | 3 | 76 | 1 | | | 1 | 0 |
| 7 | 3 | 62 | 57 | 37 | 56 | 23 | 92 | 15 | 26 | 8 | 17 | 0 | 0 | 167 | 17 | 4 | 11 | 4 | 2 | 2 | 15 | 1 | 22 | 1 | 11 | 50 | 3 | | | | | 0 | 0 |
| 7 | 17 | 62 | 56 | 40 | 26 | 35 | 58 | 9 | 92 | 5 | 11 | 0 | 0 | 8 | 15 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 7 | 62 | 56 | 58 | 26 | 22 | 58 | 7 | 57 | 3 | 10 | 0 | 0 | 78 | 22 | 4 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 8 | 21 | 62 | 56 | 87 | 58 | 8 | 89 | 2 | 27 | 2 | 1 | 0 | 0 | 187 | 22 | 5 | 17 | 1 | 11 | 1 | | | | | 9 | 50 | 2 | | | | | 0 | 0 |
| 9 | 4 | 62 | 56 | 44 | 82 | 16 | 68 | 4 | 89 | 4 | 32 | 0 | 0 | 0 | | | | | | | | | | | 18 | 51 | 3 | 50 | 1 | | | 3 | 0 |
| 9 | 18 | 62 | 56 | 34 | 58 | 12 | 26 | 11 | 68 | 7 | 64 | 0 | 0 | 135 | 17 | 4 | 22 | 3 | 11 | 3 | | | | | 27 | 51 | 4 | 50 | 1 | | | 3 | 0 |

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER AT

LOUISVILLE, KENTUCKY 84

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 3 | 61 | 21.5 | 5.4 | 7.6 | - | - | 2.5 | 3.7 | - | 44 | 96 | 164 | 0 | 5 | 113 | .1 | 293 | 820 |
| 10 | 10 | 61 | 20.0 | 7.2 | 7.8 | - | - | 1.6 | 5.5 | - | 42 | 94 | 180 | 0 | 6 | 124 | .1 | 339 | *100 |
| 10 | 17 | 61 | 19.0 | 6.0 | 7.5 | - | 16 | 1.6 | 4.7 | - | 51 | 98 | 182 | 0 | 10 | 130 | .1 | 306 | 150 |
| 10 | 24 | 61 | 18.0 | 4.1 | 7.2 | - | - | 1.3 | 3.2 | - | 62 | 94 | 194 | 0 | 8 | 130 | .1 | 402 | - |
| 10 | 31 | 61 | 16.0 | 5.4 | 7.1 | - | - | 1.3 | 3.6 | - | 73 | 71 | 192 | 0 | 11 | 148 | .1 | 395 | *100 |
| 11 | 6 | 61 | 15.0 | 6.2 | 7.2 | - | - | 1.5 | 5.6 | - | 69 | 66 | 194 | 0 | 8 | 170 | .1 | 352 | - |
| 11 | 14 | 61 | 15.0 | 8.3 | 7.2 | - | - | .9 | 5.7 | - | 40 | 78 | 130 | 0 | 5 | 93 | .1 | 217 | 530 |
| 11 | 21 | 61 | 11.0 | 7.6 | 7.2 | - | - | 4.4 | 4.9 | - | 48 | 69 | 150 | 0 | 8 | 124 | .1 | 284 | 2600 |
| 11 | 28 | 61 | 10.0 | 8.0 | 7.1 | - | - | 4.3 | 4.9 | - | 59 | 74 | 192 | 0 | 40 | 148 | .1 | 387 | 550 |
| 12 | 5 | 61 | 8.5 | 8.0 | 6.9 | - | - | 1.9 | 6.8 | - | 33 | 58 | 118 | 0 | 20 | 105 | .5 | 233 | 440 |
| 12 | 12 | 61 | 6.8 | 9.8 | 7.3 | - | 12 | 2.0 | 5.8 | - | 26 | 100 | 134 | 0 | 45 | 86 | .3 | 207 | 4400 |
| 12 | 19 | 61 | 6.8 | 9.2 | 7.2 | - | - | 2.0 | 5.8 | - | 27 | 75 | 104 | 0 | 160 | 68 | .1 | 176 | 12000 |
| 12 | 26 | 61 | 5.5 | 7.8 | 7.1 | - | - | 1.0 | 5.8 | - | 20 | 65 | 82 | 0 | 160 | 51 | .1 | 185 | 3000 |
| 1 | 2 | 62 | 2.7 | 8.0 | 7.3 | - | - | .2 | 4.8 | - | 25 | 70 | 104 | 0 | 60 | 63 | .1 | 199 | 5200 |
| 1 | 8 | 62 | - | - | - | - | 25 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 9 | 62 | 2.2 | 10.6 | 7.5 | - | - | 2.4 | 3.9 | - | 22 | 97 | 124 | 0 | 65 | 70 | .1 | 196 | 160 |
| 1 | 16 | 62 | 1.1 | 8.9 | 7.3 | - | - | 3.4 | 3.9 | - | 34 | 77 | 110 | 0 | 160 | 75 | .1 | 208 | 3800 |
| 1 | 23 | 62 | 1.6 | 5.7 | 7.5 | - | - | 3.2 | 7.6 | - | 17 | 86 | 110 | 0 | 550 | 59 | .1 | 185 | 6000 |
| 1 | 30 | 62 | 4.4 | 5.6 | 7.3 | - | - | 3.9 | 7.7 | - | 15 | 67 | 88 | 0 | 350 | 32 | .1 | 136 | 3200 |
| 2 | 6 | 62 | 3.9 | 7.2 | 7.2 | - | - | 2.6 | 3.8 | - | 20 | 72 | 100 | 0 | 85 | - | .1 | 183 | 840 |
| 2 | 13 | 62 | 3.3 | 8.9 | 7.3 | - | 9 | .5 | 1.8 | - | 20 | 74 | 102 | 0 | 100 | 56 | .1 | - | 2200 |
| 2 | 20 | 62 | 3.3 | 9.2 | 7.3 | - | - | 2.5 | 3.8 | - | 17 | 73 | 94 | 0 | 65 | - | .1 | 123 | 2500 |
| 2 | 27 | 62 | 6.1 | 8.3 | 7.3 | - | - | 4.3 | 5.8 | - | 16 | 76 | 104 | 0 | 800 | 46 | .1 | 188 | 5200 |
| 3 | 6 | 62 | 5.5 | 4.7 | 7.1 | - | - | 2.4 | 3.8 | - | 10 | 50 | 66 | 0 | 440 | - | .2 | 138 | 2200 |
| 3 | 13 | 62 | 5.0 | 8.9 | 7.4 | - | - | 1.6 | 1.9 | - | 15 | 75 | 104 | 0 | 160 | 59 | .2 | 185 | 1400 |
| 3 | 20 | 62 | 7.2 | 8.6 | 7.2 | - | - | 2.4 | 4.7 | - | 23 | 64 | 106 | 0 | 90 | 78 | .2 | 204 | 1700 |
| 3 | 27 | 62 | 8.3 | 7.2 | 7.2 | - | - | .4 | 4.8 | - | 13 | 53 | 96 | 0 | 250 | 48 | .1 | 137 | 3100 |
| 4 | 3 | 62 | 14.0 | 7.6 | 7.3 | - | 42 | 1.6 | 2.8 | - | 12 | 66 | 98 | 0 | 250 | 37 | .3 | 140 | 7500 |
| 4 | 10 | 62 | 18.0 | 7.4 | 7.3 | - | 8 | 1.5 | 2.8 | - | 15 | 59 | 98 | 0 | 100 | 59 | .3 | 198 | 600 |
| 4 | 17 | 62 | 18.0 | 5.4 | 7.1 | 2.5 | 44 | 1.6 | 2.9 | - | 12 | 47 | 74 | 0 | 190 | 57 | .1 | 146 | 1600 |
| 4 | 24 | 62 | 11.1 | 7.4 | 7.1 | .8 | 25 | 1.4 | 3.9 | - | 16 | 49 | 98 | 0 | 75 | 73 | .1 | - | 1600 |
| 5 | 1 | 62 | 16.1 | 7.0 | 7.0 | 1.2 | 25 | 1.2 | 2.9 | - | 18 | 60 | 108 | 0 | 8 | 86 | .1 | 231 | 1000 |
| 5 | 8 | 62 | 18.3 | 5.4 | 7.2 | 1.6 | 20 | 1.6 | 3.8 | - | 21 | 70 | 120 | 0 | 6 | 95 | .1 | 247 | 1500 |
| 5 | 15 | 62 | 21.1 | 5.6 | 7.2 | - | - | 1.7 | 2.9 | - | 23 | 79 | 136 | 0 | 10 | 90 | .1 | - | 800 |
| 5 | 22 | 62 | 25.0 | - | 7.5 | - | - | 1.6 | 2.9 | - | 24 | 83 | 138 | 0 | 5 | 95 | .1 | 278 | *40 |
| 5 | 29 | 62 | 24.4 | - | 7.2 | - | - | 2.6 | 3.9 | - | 29 | 87 | 152 | 0 | 18 | 101 | .1 | 292 | 31000 |
| 6 | 5 | 62 | 25.0 | - | 7.2 | - | 23 | 1.7 | 3.8 | - | 30 | 92 | 148 | 0 | 15 | 76 | .2 | 261 | 1700 |
| 6 | 12 | 62 | 26.1 | - | 7.4 | - | 34 | .7 | 2.8 | - | - | 98 | 144 | 0 | 20 | - | .2 | 273 | 2000 |
| 6 | 19 | 62 | 25.5 | - | 7.3 | - | 30 | 1.6 | 2.9 | - | - | 84 | 144 | 0 | 6 | - | .2 | 282 | 440 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 26 | 62 | 27.2 | - | 7.2 | - | 24 | 1.5 | 2.8 | - | - | 78 | 158 | 0 | 5 | - | .1 | 304 | 200 |
| 7 | 3 | 62 | 28.4 | - | 7.1 | - | 20 | 2.6 | 3.8 | - | 34 | 78 | 160 | 0 | 6 | 100 | .6 | 307 | 40 |
| 7 | 10 | 62 | 28.9 | - | 7.2 | 1.0 | 22 | .6 | 2.8 | - | - | 72 | 132 | 0 | 9 | - | .1 | 228 | 200 |
| 7 | 17 | 62 | 27.2 | - | 7.2 | .4 | 25 | 1.7 | 3.9 | - | - | 77 | 120 | 0 | 150 | 78 | .4 | 205 | 3900 |
| 7 | 24 | 62 | 26.6 | - | 7.3 | .6 | 26 | .7 | 3.9 | - | - | 85 | 120 | 0 | 75 | - | .3 | 206 | 1500 |
| 7 | 31 | 62 | 26.6 | - | 7.1 | 2.0 | 24 | .1 | 3.5 | - | 43 | 94 | 144 | 0 | 35 | 70 | .1 | 268 | 300 |
| 8 | 7 | 62 | 27.7 | - | 7.2 | 1.0 | 20 | 3.4 | 3.9 | - | - | 73 | 138 | 0 | 12 | 90 | .1 | 266 | 200 |
| 8 | 14 | 62 | 27.2 | - | 7.1 | 1.2 | 23 | 1.5 | 2.9 | - | - | 53 | 132 | 0 | 7 | 101 | .1 | 283 | 200 |
| 8 | 21 | 62 | 27.7 | - | 7.1 | 1.5 | 24 | 3.5 | 3.9 | - | - | 59 | 124 | 0 | 7 | 98 | .1 | 233 | 300 |
| 8 | 28 | 62 | 26.6 | - | 7.1 | 2.9 | 25 | 4.6 | 4.9 | - | 41 | 56 | 142 | 0 | 6 | 110 | .3 | 253 | 3200 |
| 9 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 9 | 4 | 62 | 26.6 | - | 7.0 | .8 | 21 | .1 | 3.8 | - | - | 52 | 136 | 0 | 6 | - | .1 | 281 | - |
| 9 | 11 | 62 | 24.4 | - | 6.9 | .8 | 21 | .6 | 1.9 | - | 42 | 54 | 130 | 0 | 6 | 95 | .1 | 270 | 5000 |
| 9 | 18 | 62 | 24.4 | - | 6.9 | - | 34 | .6 | 1.9 | - | 55 | 49 | 144 | 0 | 5 | 110 | .1 | 332 | *200 |
| 9 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 9 | 25 | 62 | 22.2 | - | 7.0 | .2 | 10 | .7 | 1.9 | - | 53 | 51 | 148 | 0 | 6 | 113 | .1 | 319 | - |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 18 | 61 | 10 | 31 | 3302 | 461 | 212 | 249 | 9 | 45 | 79 | 6 | 5 | 59 | 9 | 21 | 32 | 4 | 22 |
| 11 | 8 | 61 | 11 | 20 | 2176 | 688 | 262 | 426 | 3 | 44 | 110 | 12 | 11 | 79 | 8 | 34 | 16 | 3 | 52 |
| 12 | 20 | 61 | 12 | 31 | 3588 | 261 | 97 | 164 | 1 | 19 | 45 | 10 | 6 | 28 | 1 | 11 | 7 | 2 | 12 |
| 1 | 17 | 62 | 1 | 31 | 4466 | 245 | 112 | 133 | 2 | 22 | 47 | 6 | 7 | 32 | 2 | 10 | 4 | 2 | 25 |
| 2 | 14 | 62 | 2 | 28 | 4593 | 207 | 67 | 140 | 1 | 11 | 34 | 4 | 5 | 23 | 2 | 10 | 3 | 1 | 7 |
| 3 | 14 | 62 | 3 | 28 | 3613 | 276 | 104 | 172 | 4 | 22 | 43 | 6 | 6 | 30 | 1 | 13 | 9 | 2 | 11 |
| 4 | 11 | 62 | 4 | 25 | 4330 | 195 | 76 | 119 | 5 | 16 | 31 | 6 | 4 | 20 | 1 | 10 | 7 | 1 | 6 |
| 5 | 9 | 62 | 5 | 21 | 4315 | 215 | 107 | 108 | 3 | 25 | 41 | 4 | 3 | 32 | 2 | 15 | 8 | 2 | 13 |
| 6 | 13 | 62 | 6 | 27 | 4354 | 243 | 139 | 104 | 0 | 33 | 46 | 2 | 5 | 35 | 4 | 19 | 17 | 3 | 21 |
| 7 | 18 | 62 | 7 | 30 | 4191 | 194 | 77 | 117 | 1 | 17 | 31 | 5 | 3 | 23 | 0 | 12 | 5 | 2 | 9 |
| 8 | 15 | 62 | 8 | 24 | 5401 | 181 | 75 | 106 | 2 | 17 | 32 | 2 | 1 | 26 | 3 | 8 | 5 | 2 | 9 |
| 9 | 5 | 62 | 9 | 19 | 4500 | 241 | 112 | 129 | 2 | 30 | 45 | 2 | 2 | 38 | 3 | 12 | 9 | 2 | 12 |

**STATION LOCATION** OHIO RIVER AT

CINCINNATI, OHIO

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g |
| 10 | 4 | 61 | 10 | 14 | 0 | 1 | 0 | 2 | 0 | 2 | 8 | 9 | 4 | 11 | 12 | 14 | | | | | |
| 10 | 25 | 61 | 11 | 2 | - | - | - | - | - | - | 12 | 12 | 3 | 14 | 15 | 18 | | | | | |
| 11 | 1 | 61 | 11 | 9 | - | - | - | - | - | - | 11 | 10 | 25 | 13 | 36 | 16 | | | | | |
| 11 | 8 | 61 | 11 | 16 | 0 | 0 | 1 | 1 | 1 | 1 | 10 | 4 | 20 | 6 | 30 | 7 | | | | | |
| 11 | 15 | 61 | 11 | 22 | - | - | - | - | - | - | 12 | 8 | 21 | 10 | 33 | 13 | | | | | |
| 11 | 22 | 61 | 12 | 1 | - | - | - | - | - | - | 4 | 11 | 15 | 14 | 19 | 18 | | | | | |
| 11 | 29 | 61 | 12 | 6 | - | - | - | - | - | - | 82 | 11 | 16 | 7 | 98 | 13 | | | | | |
| 12 | 6 | 61 | 12 | 12 | 1 | 1 | 0 | 1 | 1 | 1 | 15 | 6 | 21 | 8 | 36 | 10 | | | | | |
| 12 | 13 | 61 | 12 | 19 | - | - | - | - | - | - | 23 | 6 | 20 | 6 | 43 | 8 | | | | | |
| 12 | 20 | 61 | 12 | 29 | - | - | - | - | - | - | 8 | 7 | 4 | 6 | 12 | 9 | | | | | |
| 12 | 27 | 61 | 1 | 5 | - | - | - | - | - | - | 29 | 8 | 15 | 7 | 44 | 11 | | | | | |
| 1 | 3 | 62 | 1 | 11 | 1 | 1 | 0 | 1 | 1 | 1 | 19 | 5 | 13 | 5 | 32 | 7 | | | | | |
| 1 | 10 | 62 | 1 | 17 | - | - | - | - | - | - | 17 | 7 | 15 | 7 | 32 | 10 | | | | | |
| 1 | 16 | 62 | 1 | 24 | - | - | - | - | - | - | 32 | 7 | 24 | 7 | 56 | 10 | | | | | |
| 1 | 24 | 62 | 1 | 31 | - | - | - | - | - | - | 38 | 9 | 19 | 7 | 57 | 11 | | | | | |
| 1 | 31 | 62 | 2 | 9 | - | - | - | - | - | - | 190 | 10 | 26 | 7 | 216 | 12 | | | | | |
| 2 | 7 | 62 | 2 | 14 | 1 | 1 | 0 | 1 | 1 | 1 | 41 | 7 | 17 | 5 | 58 | 9 | | | | | |
| 2 | 14 | 62 | 2 | 21 | - | - | - | - | - | - | 17 | 6 | 14 | 7 | 31 | 9 | | | | | |
| 2 | 21 | 62 | 3 | 2 | - | - | - | - | - | - | 4 | 6 | 3 | 7 | 7 | 9 | | | | | |
| 2 | 28 | 62 | 3 | 12 | - | - | - | - | - | - | 118 | 21 | 28 | 7 | 146 | 22 | | | | | |
| 3 | 7 | 62 | 3 | 16 | 0 | 1 | 0 | 0 | 0 | 1 | 56 | 8 | 27 | 5 | 83 | 9 | | | | | |
| 3 | 14 | 62 | 3 | 26 | - | - | - | - | - | - | 33 | 9 | 8 | 7 | 41 | 11 | | | | | |
| 3 | 21 | 62 | 3 | 30 | - | - | - | - | - | - | 73 | 13 | 22 | 5 | 95 | 14 | | | | | |
| 3 | 28 | 62 | 4 | 5 | - | - | - | - | - | - | 45 | 8 | 18 | 7 | 63 | 11 | | | | | |
| 4 | 4 | 62 | 4 | 13 | 3 | 2 | 0 | 1 | 3 | 2 | 77 | 8 | 16 | 5 | 93 | 9 | | | | | |
| 4 | 11 | 62 | 4 | 24 | - | - | - | - | - | - | 41 | 13 | 21 | 6 | 62 | 14 | | | | | |
| 4 | 18 | 62 | 4 | 30 | - | - | - | - | - | - | 45 | 8 | 15 | 6 | 60 | 10 | | | | | |
| 4 | 25 | 62 | 6 | 14 | - | - | - | - | - | - | 20 | 9 | 18 | 9 | 38 | 13 | | | | | |
| 5 | 2 | 62 | 6 | 4 | - | - | - | - | - | - | 5 | 7 | 19 | 9 | 24 | 11 | | | | | |
| 5 | 9 | 62 | 6 | 12 | 2 | 1 | 0 | 1 | 2 | 1 | 23 | 7 | 12 | 7 | 35 | 10 | | | | | |
| 5 | 16 | 62 | 6 | 25 | - | - | - | - | - | - | 3 | 6 | 17 | 9 | 20 | 11 | | | | | |
| 5 | 23 | 62 | 6 | 26 | - | - | - | - | - | - | 12 | 6 | 17 | 8 | 29 | 10 | | | | | |
| 5 | 28 | 62 | 6 | 27 | - | - | - | - | - | - | 102 | 21 | 24 | 8 | 126 | 22 | | | | | |
| 6 | 6 | 62 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 7 | 28 | 10 | 30 | 12 | | | | | |
| 6 | 13 | 62 | 7 | 16 | - | - | - | - | - | - | 9 | 6 | 11 | 8 | 20 | 10 | | | | | |
| 6 | 20 | 62 | 7 | 17 | - | - | - | - | - | - | 4 | 5 | 15 | 6 | 19 | 7 | | | | | |
| 6 | 27 | 62 | 7 | 24 | - | - | - | - | - | - | 14 | 5 | 8 | 8 | 22 | 9 | | | | | |
| 7 | 2 | 62 | 7 | 31 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 14 | 11 | 21 | 18 | 25 | | | | | |
| 7 | 18 | 62 | 8 | 8 | - | - | - | - | - | - | 10 | 6 | 17 | 7 | 27 | 9 | | | | | |
| 7 | 25 | 62 | 9 | 20 | - | - | - | - | - | - | 0 | 3 | 8 | 4 | 8 | 5 | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 8 | 1 | 62 | 9 | 19 | - | - | - | - | - | - | 9 | 6 | 22 | 8 | 31 | 10 | | | | | | |
| 8 | 8 | 62 | 8 | 28 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 5 | 25 | 8 | 25 | 9 | | | | | | |
| 8 | 15 | 62 | 8 | 29 | - | - | - | - | - | - | 0 | 7 | 13 | 7 | 13 | 10 | | | | | | |
| 8 | 22 | 62 | 9 | 5 | - | - | - | - | - | - | 0 | 7 | 14 | 7 | 14 | 10 | | | | | | |
| 8 | 29 | 62 | 9 | 27 | - | - | - | - | - | - | 0 | 6 | 19 | 10 | 19 | 12 | | | | | | |
| 9 | 5 | 62 | 9 | 17 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 5 | 19 | 8 | 22 | 9 | | | | | | |
| 9 | 11 | 62 | 10 | 2 | - | - | - | - | - | - | 2 | 10 | 8 | 13 | 10 | 16 | | | | | | |
| 9 | 19 | 62 | 10 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 32 | 11 | 24 | 14 | 56 | 18 | | | | | | |
| 9 | 26 | 62 | 10 | 16 | - | - | - | - | - | - | 4 | 11 | 13 | 16 | 17 | 19 | | | | | | |

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 4 | 61 | 1300 | 70 | 20 | 780 | 0 | 20 | 160 | 200 | 90 | 90 | 180 | 44 | 1 | 60 | 1 | 69 | 1 | | | | | | | | | | | | | | |
| 10 | 18 | 61 | 1900 | 60 | 80 | 540 | 20 | 250 | 830 | 640 | 190 | 40 | 120 | 68 | 2 | 69 | 1 | 38 | 1 | 57 | 1 | | | | | | | | | | | | |
| 11 | 8 | 61 | 3500 | 20 | 20 | 1080 | 0 | 100 | 20 | 1740 | 540 | 680 | 600 | 60 | 4 | 35 | 2 | 92 | 2 | 68 | 1 | 31 | 1 | 38 | 1 | | | | | | | | |
| 11 | 22 | 61 | 3400 | 20 | 190 | 1020 | 0 | 230 | 0 | 1080 | 850 | 150 | 170 | 69 | 3 | 92 | 2 | 38 | 2 | 68 | 1 | 24 | 1 | 16 | 1 | | | | | | | | |
| 12 | 6 | 61 | 1000 | 0 | 0 | 150 | 0 | 40 | 0 | 500 | 270 | 40 | 80 | 69 | 2 | | | | | | | | | | | | | | | | | | |
| 12 | 20 | 61 | 800 | 0 | 0 | 20 | 0 | 0 | 0 | 400 | 360 | 200 | 1320 | 69 | 2 | 92 | 1 | | | | | | | | | | | | | | | | |
| 1 | 3 | 62 | 600 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 470 | 0 | 110 | 82 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 17 | 62 | 400 | 0 | 0 | 20 | 0 | 0 | 0 | 70 | 270 | 90 | 310 | | | | | | | | | | | | | | | | | | | | |
| 2 | 7 | 62 | 500 | 0 | 0 | 20 | 0 | 20 | 0 | 180 | 290 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 2 | 21 | 62 | 300 | 0 | 0 | 20 | 0 | 0 | 0 | 40 | 210 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 7 | 62 | 2000 | 60 | 0 | 0 | 0 | 20 | 40 | 370 | 1470 | 20 | 190 | 68 | 1 | 88 | 1 | 92 | 1 | 87 | 1 | | | | | | | | | | | | |
| 3 | 21 | 62 | 200 | 20 | 0 | 0 | 0 | 0 | 0 | 20 | 160 | 20 | 360 | | | | | | | | | | | | | | | | | | | | |
| 4 | 4 | 62 | 1000 | 0 | 20 | 20 | 0 | 20 | 20 | 190 | 700 | 20 | 150 | 69 | 1 | 84 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 4 | 18 | 62 | 800 | 0 | 0 | 20 | 20 | 40 | 0 | 270 | 410 | 20 | 100 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 9 | 62 | 2000 | 20 | 150 | 400 | 0 | 130 | 20 | 550 | 780 | 930 | 380 | 71 | 2 | 92 | 1 | 77 | 1 | | | | | | | | | | | | | | |
| 5 | 23 | 62 | 33000 | 130 | 6200 | 17010 | 890 | 250 | 130 | 5660 | 2740 | 1980 | 1220 | 24 | 7 | 16 | 6 | 71 | 5 | 92 | 4 | 40 | 4 | 69 | 4 | 38 | 3 | 50 | 3 | 68 | 3 | 30 | 2 |
| 6 | 6 | 62 | 36600 | 40 | 6250 | 2150 | * | 380 | 40 | 17940 | 2280 | 10850 | 800 | 71 | 7 | 50 | 6 | 16 | 6 | 92 | 4 | 69 | 4 | 17 | 2 | 38 | 2 | 40 | 2 | 31 | 2 | 68 | 1 |
| 6 | 20 | 62 | 36800 | 0 | 300 | 3120 | 0 | 720 | 0 | 28950 | 3670 | 16920 | 2570 | 69 | 7 | 68 | 7 | 92 | 5 | 38 | 3 | 40 | 3 | 57 | 3 | 24 | 2 | 17 | 1 | 32 | 1 | 35 | 1 |
| 7 | 2 | 62 | 8600 | 80 | 40 | 1480 | 0 | 130 | 0 | 4940 | 1900 | 2790 | 590 | 69 | 5 | 92 | 4 | 71 | 3 | 68 | 3 | 40 | 1 | 88 | 1 | 32 | 1 | 39 | 1 | 44 | 1 | | |
| 7 | 18 | 62 | 2000 | 0 | 0 | 360 | 0 | 0 | 0 | 1100 | 510 | 1600 | 460 | 68 | 3 | 92 | 2 | 69 | 1 | | | | | | | | | | | | | | |
| 8 | 8 | 62 | 1800 | 110 | 0 | 130 | 0 | 0 | 0 | 760 | 800 | 170 | 80 | 92 | 1 | 69 | 1 | | | | | | | | | | | | | | | | |
| 8 | 22 | 62 | 300 | 0 | 0 | 0 | 0 | 210 | 40 | 80 | 0 | 0 | 0 | 51 | 1 | | | | | | | | | | | | | | | | | | |
| 9 | 5 | 62 | 600 | 0 | 0 | 60 | 0 | 0 | 0 | 420 | 80 | 0 | 40 | 69 | 1 | 68 | 1 | | | | | | | | | | | | | | | | |
| 9 | 19 | 62 | 00 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 70 | 10 | | | | | | | | | | | | | | | | | | | | |
| 9 | 29 | 62 | 100 | 0 | 0 | 10 | 0 | 0 | 0 | 10 | 60 | 30 | 70 | | | | | | | | | | | | | | | | | | | | |
| *6 | 6 | 62 | | | | | 7510 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 4 | 61 | 89 | 47 | 56 | 30 | 92 | 6 | 53 | 4 | 15 | 0 | 0 | 110 | 22 | 4 | 11 | 3 | 21 | 1 | | | | | 135 | 50 | 5 | 76 | 4 | 53 | 4 | 0 | 0 |
| 10 | 18 | 61 | 56 | 69 | 89 | 23 | 58 | 3 | 26 | 2 | 3 | 0 | 0 | 243 | 11 | 5 | 17 | 4 | 22 | 2 | | | | | 114 | 50 | 5 | 52 | 4 | 76 | 3 | 1 | 0 |
| 11 | 8 | 61 | 56 | 67 | 58 | 16 | 89 | 9 | 57 | 3 | 5 | 0 | 20 | 55 | 11 | 2 | 46 | 1 | | | | | | | 2 | | | | | | | 2 | 0 |
| 11 | 22 | 61 | 56 | 81 | 89 | 10 | 58 | 2 | 26 | 2 | 5 | 0 | 10 | 329 | 11 | 6 | 17 | 2 | 2 | 1 | | | | | 3 | | | | | | | 0 | 0 |
| 12 | 6 | 61 | 64 | 15 | 26 | 14 | 65 | 11 | 36 | 11 | 49 | 0 | 0 | 5 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 12 | 20 | 61 | 56 | 49 | 92 | 15 | 62 | 10 | 47 | 8 | 18 | 20 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 1 | 3 | 62 | 56 | 19 | 92 | 10 | 62 | 10 | 88 | 10 | 51 | 140 | 0 | 2 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 1 | 17 | 62 | 56 | 30 | 92 | 14 | 26 | 7 | 2 | 5 | 44 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 2 | 7 | 62 | 26 | 22 | 36 | 13 | 92 | 13 | 74 | 6 | 46 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 2 | 21 | 62 | | | | | | | | | | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 3 | 7 | 62 | 26 | 17 | 62 | 8 | 92 | 8 | 71 | 6 | 61 | 100 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 21 | 62 | 92 | 20 | 62 | 11 | 26 | 8 | 36 | 7 | 54 | 110 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 4 | 62 | 56 | 13 | 47 | 13 | 92 | 12 | 62 | 9 | 53 | 40 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 18 | 62 | 92 | 18 | 56 | 8 | 36 | 7 | 89 | 6 | 61 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 9 | 62 | 92 | 28 | 89 | 12 | 9 | 11 | 82 | 10 | 39 | 20 | 10 | 78 | 2 | 4 | 11 | 2 | 21 | 1 | | | | | 3 | | | | | | | 1 | 0 |
| 5 | 23 | 62 | 92 | 45 | 56 | 33 | 58 | 5 | 82 | 5 | 12 | 40 | 20 | 106 | 2 | 4 | 11 | 3 | 17 | 1 | 3 | 1 | | | 93 | 50 | 5 | 76 | 3 | 51 | 2 | 0 | 0 |
| 6 | 6 | 62 | 56 | 38 | 82 | 35 | 92 | 9 | 58 | 8 | 10 | 300 | 0 | 463 | 22 | 5 | 17 | 4 | 2 | 4 | 11 | 1 | | | 114 | 50 | 5 | 76 | 3 | | | 0 | 0 |
| 6 | 20 | 62 | 56 | 31 | 57 | 24 | 26 | 21 | 92 | 18 | 6 | 0 | 10 | 936 | 22 | 7 | 11 | 6 | 17 | 5 | 2 | 4 | 15 | 1 | 47 | 76 | 4 | 50 | 3 | 51 | 2 | 0 | 0 |
| 7 | 2 | 62 | 58 | 37 | 56 | 25 | 92 | 20 | 57 | 9 | 9 | 0 | 0 | 174 | 17 | 4 | 11 | 3 | 9 | 3 | 21 | 3 | 22 | 2 | 22 | 76 | 3 | 53 | 2 | 50 | 1 | 1 | 0 |
| 7 | 18 | 62 | 56 | 49 | 92 | 21 | 26 | 12 | 58 | 9 | 9 | 0 | 0 | 43 | 11 | 2 | 17 | 1 | 22 | 1 | | | | | 43 | 50 | 4 | 76 | 2 | | | 0 | 2 |
| 8 | 8 | 62 | 56 | 36 | 26 | 33 | 58 | 9 | 57 | 1 | 21 | 0 | 0 | 6 | | | | | | | | | | | 12 | 50 | 2 | 51 | 1 | 53 | 1 | 0 | 2 |
| 8 | 22 | 62 | 10 | 43 | 56 | 11 | 26 | 7 | 46 | 7 | 32 | 0 | 0 | 8 | | | | | | | | | | | 27 | 50 | 3 | 76 | 2 | 51 | 1 | 0 | 0 |
| 9 | 5 | 62 | 10 | 25 | 56 | 23 | 26 | 12 | 89 | 3 | 37 | 0 | 0 | 1 | | | | | | | | | | | 40 | 50 | 4 | 53 | 2 | 51 | 1 | 0 | 0 |
| 9 | 19 | 62 | 94 | 18 | 10 | 16 | 26 | 12 | 56 | 7 | 47 | 0 | 0 | 0 | | | | | | | | | | | 39 | 77 | 3 | 50 | 2 | 51 | 2 | 0 | 0 |
| 9 | 29 | 62 | 10 | 38 | 56 | 9 | 26 | 8 | 68 | 6 | 39 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 4 | 61 | 20.4 | 8.3 | 7.7 | .8 | 8 | 3.3 | 5.8 | .2 | 49 | 54 | 167 | 6 | 3 | 120 | .0 | 282 | 2200 |
| 10 | 11 | 61 | 21.1 | 8.6 | 7.6 | 1.3 | 16 | 3.5 | 5.7 | .3 | 45 | 50 | 174 | 7 | 2 | 140 | .0 | 379 | - |
| 10 | 18 | 61 | 18.7 | 8.5 | 7.5 | 1.6 | 10 | 2.8 | 5.7 | .2 | 63 | 52 | 183 | 7 | 2 | 152 | .0 | 366 | 550 |
| 10 | 25 | 61 | 17.8 | 7.0 | 7.1 | 3.8 | 26 | .5 | 11.8 | .7 | 62 | 40 | 192 | 6 | 60 | 144 | .0 | 399 | 5500 |
| 11 | 1 | 61 | 16.5 | 8.9 | 7.3 | 1.3 | 14 | .8 | 18.0 | 1.7 | 81 | 52 | 164 | 7 | 7 | 130 | .0 | 368 | 2200 |
| 11 | 8 | 61 | 13.7 | 9.6 | 7.3 | .9 | 10 | 1.0 | 6.2 | .3 | 40 | 36 | 138 | 10 | 9 | 120 | .0 | 259 | 700 |
| 11 | 15 | 61 | 13.4 | 10.2 | 7.1 | 1.2 | 12 | .7 | 6.9 | .4 | 51 | 36 | 154 | 10 | 9 | 175 | .0 | 331 | 780 |
| 11 | 22 | 61 | 11.7 | 9.7 | 7.1 | 3.1 | - | 1.1 | 9.6 | .3 | 55 | 33 | 165 | 7 | 10 | 192 | .0 | 350 | 33 |
| 11 | 29 | 61 | 9.0 | 8.2 | 7.2 | 3.7 | 48 | 1.4 | 10.9 | .6 | 35 | 38 | 121 | 7 | 240 | 132 | .0 | 233 | 6700 |
| 12 | 6 | 61 | 7.8 | 11.6 | 7.3 | .7 | 12 | .6 | 6.7 | .4 | 28 | 36 | 128 | 5 | 15 | 120 | .0 | 235 | 3600 |
| 12 | 13 | 61 | 6.0 | 11.0 | 7.2 | 1.4 | 17 | .7 | 7.9 | .4 | 36 | 36 | 114 | 4 | 60 | 100 | .0 | 205 | 4500 |
| 12 | 20 | 61 | 5.8 | 11.2 | 7.2 | 2.2 | 39 | .9 | 9.3 | .3 | 24 | 30 | 88 | 5 | 150 | 80 | .0 | 271 | 3000 |
| 12 | 27 | 61 | 4.9 | 12.1 | 7.0 | 1.2 | 37 | .8 | 7.7 | .3 | 18 | 26 | 95 | 4 | 85 | 74 | .0 | 180 | 10000 |
| 1 | 3 | 62 | 1.9 | 8.3 | 7.0 | 1.1 | 27 | .6 | 5.6 | .3 | 21 | 34 | 92 | 3 | 45 | 70 | .0 | 172 | 1000 |
| 1 | 10 | 62 | 1.9 | 9.2 | 6.8 | 3.4 | 42 | .5 | 9.5 | .4 | 24 | 39 | 109 | 8 | 140 | 94 | .0 | 194 | 13000 |
| 1 | 17 | 62 | 1.2 | 12.8 | 7.2 | 3.3 | 28 | .5 | 6.4 | .4 | 22 | 37 | 121 | 5 | 85 | 116 | .0 | 216 | 4600 |
| 1 | 24 | 62 | 1.3 | 12.9 | 7.5 | 4.6 | 89 | 4.6 | 9.7 | .6 | 26 | 38 | 93 | 9 | 260 | 78 | .0 | 172 | 11000 |
| 1 | 31 | 62 | 3.8 | 12.9 | 7.3 | 2.7 | 43 | .9 | 8.0 | .8 | 22 | 38 | 98 | 5 | 160 | 75 | .0 | 213 | 1800 |
| 2 | 7 | 62 | 2.2 | 13.0 | 7.2 | 2.3 | 36 | .3 | 7.3 | .4 | 21 | 33 | 89 | 5 | 110 | 68 | .1 | 138 | 2300 |
| 2 | 14 | 62 | 2.4 | 13.2 | 7.2 | 2.6 | 53 | .5 | 7.8 | .4 | 19 | 30 | 89 | 3 | 110 | 55 | .0 | 144 | 5500 |
| 2 | 21 | 62 | 3.8 | 11.9 | 7.2 | 4.3 | 35 | .6 | 6.0 | .2 | 23 | 31 | 96 | 6 | 45 | 84 | .0 | 190 | 2200 |
| 2 | 28 | 62 | 5.5 | 10.7 | 7.3 | 3.5 | 63 | 1.0 | 9.2 | .3 | 20 | 33 | 97 | 9 | 550 | 64 | .0 | 172 | 35000 |
| 3 | 7 | 62 | 4.3 | 11.2 | 7.1 | 2.5 | 46 | 2.5 | 6.0 | .2 | 11 | 28 | 81 | 7 | 200 | - | .0 | 130 | 3200 |
| 3 | 14 | 62 | 5.1 | 11.0 | 7.2 | 2.9 | 46 | 2.3 | 5.8 | .1 | 23 | 29 | 86 | 8 | 120 | 70 | .1 | 172 | 12000 |
| 3 | 21 | 62 | 7.2 | 11.9 | 7.2 | 3.4 | 51 | 2.8 | 7.6 | .2 | 19 | 38 | 105 | 6 | 220 | - | .0 | 167 | 6000 |
| 3 | 28 | 62 | 7.8 | 10.4 | 7.3 | 2.6 | 85 | 2.5 | 6.0 | .2 | 11 | 32 | 92 | 6 | 140 | - | .0 | 149 | 5600 |
| 4 | 4 | 62 | 8.4 | 10.4 | 7.1 | 2.2 | 34 | 2.3 | 5.8 | .1 | 9 | 24 | 82 | 10 | 160 | 59 | .0 | 156 | 4000 |
| 4 | 11 | 62 | 10.1 | 9.0 | 7.0 | 2.2 | 36 | 2.0 | 5.6 | .1 | 10 | 27 | 81 | 10 | 100 | - | .0 | 128 | 2600 |
| 4 | 18 | 62 | 9.7 | 10.1 | 7.2 | 2.2 | 32 | 1.7 | 5.9 | .3 | 7 | 23 | 72 | 7 | 110 | 60 | .0 | 136 | 6100 |
| 4 | 25 | 62 | 12.2 | 9.3 | 7.0 | 1.9 | 27 | 2.0 | 4.0 | .1 | 12 | 31 | 97 | 4 | 65 | - | .0 | 174 | 830 |
| 5 | 2 | 62 | 16.0 | 8.5 | 7.3 | 1.4 | 22 | 2.5 | 4.8 | .2 | 14 | 36 | 116 | 3 | 35 | 86 | .0 | 218 | 610 |
| 5 | 9 | 62 | 19.0 | 7.9 | 7.1 | 2.1 | 22 | 1.0 | 6.0 | .3 | 18 | 35 | 117 | 5 | 95 | 79 | .1 | 221 | 1200 |
| 5 | 16 | 62 | 23.8 | 9.0 | 7.5 | 2.1 | 23 | 2.2 | 4.6 | .1 | 20 | 41 | 130 | 2 | 6 | 99 | .0 | 246 | 100 |
| 5 | 23 | 62 | 25.2 | 8.9 | 7.7 | 2.1 | 26 | 2.3 | 5.6 | .1 | 25 | 42 | 140 | 4 | 35 | 126 | .0 | 273 | 2000 |
| 5 | 28 | 62 | 24.0 | 5.7 | 7.2 | 4.6 | 39 | .9 | 8.8 | .3 | 25 | 56 | 134 | 6 | 270 | 90 | .1 | 260 | - |
| 6 | 6 | 62 | 26.1 | 8.1 | 7.6 | 2.3 | 18 | 2.8 | 6.9 | .1 | 36 | 51 | 141 | 12 | 15 | 77 | .1 | 272 | 770 |
| 6 | 13 | 62 | 25.2 | 8.5 | 7.9 | 3.5 | 22 | 3.0 | 6.7 | .2 | - | 50 | 137 | 15 | 10 | - | .1 | 282 | 1500 |
| 6 | 20 | 62 | 26.9 | 8.1 | 7.3 | 2.8 | 24 | .9 | 7.8 | .2 | 46 | 41 | 152 | 10 | 25 | 116 | .0 | 309 | *170 |
| 6 | 27 | 62 | 27.2 | 7.3 | 7.1 | 1.7 | 21 | .8 | 8.6 | .2 | 39 | 39 | 154 | 10 | 15 | 104 | .0 | 334 | 590 |

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** OHIO

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER AT
CINCINNATI, OHIO 37

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 2 | 62 | 28.4 | 8.1 | 7.3 | 1.9 | 22 | 2.8 | 8.5 | .2 | - | 30 | 144 | 6 | 7 | 144 | .0 | 301 | 200 |
| 7 | 11 | 62 | 27.0 | 6.9 | 7.0 | 1.9 | 18 | 3.2 | 5.6 | .2 | 25 | 34 | 122 | 9 | 40 | - | .0 | 237 | 780 |
| 7 | 18 | 62 | 27.2 | 6.0 | 7.1 | 2.2 | 26 | .9 | 7.9 | .5 | 27 | 37 | 110 | 13 | 20 | - | .1 | 234 | 950 |
| 7 | 25 | 62 | 27.0 | 6.7 | 7.1 | .9 | 21 | 3.2 | 5.4 | .2 | 29 | 35 | 115 | 10 | 25 | 85 | .0 | 244 | 1000 |
| 8 | 1 | 62 | 26.2 | 7.0 | 7.0 | 1.1 | 17 | .9 | 9.6 | .7 | 33 | 38 | 123 | 9 | 15 | - | .0 | 254 | 670 |
| 8 | 8 | 62 | 28.6 | 6.6 | 7.1 | .8 | 46 | 2.9 | 5.2 | .3 | - | 34 | 122 | 10 | 7 | - | .1 | 279 | 2100 |
| 8 | 15 | 62 | 26.0 | 7.6 | 7.5 | .9 | 18 | 3.0 | 5.4 | .3 | 41 | 36 | 123 | 5 | 1 | 73 | .0 | 307 | 930 |
| 8 | 22 | 62 | 27.2 | 7.0 | 7.0 | 1.4 | 20 | 1.6 | 8.8 | .6 | 46 | 34 | 118 | 6 | 1 | 104 | .0 | 303 | 540 |
| 8 | 29 | 62 | 27.8 | 6.7 | 7.1 | 1.2 | 19 | 3.9 | 6.6 | .3 | 52 | 30 | 138 | 5 | 1 | 102 | .0 | 327 | 540 |
| 9 | 5 | 62 | 26.9 | 6.1 | 7.2 | 1.0 | 20 | .4 | 8.8 | .6 | 49 | 37 | 144 | 10 | 2 | 104 | .1 | 310 | 1400 |
| 9 | 12 | 62 | 23.4 | 6.1 | 7.1 | 1.2 | 25 | 1.6 | 9.9 | .7 | 67 | 37 | 172 | 3 | 2 | 113 | .0 | 385 | 2300 |
| 9 | 19 | 62 | 23.5 | 6.6 | 7.0 | .7 | 21 | 1.2 | 7.5 | .5 | 68 | 37 | 184 | 6 | 1 | 124 | .1 | 386 | 890 |
| 9 | 26 | 62 | 20.7 | 7.6 | 7.2 | 1.2 | 22 | 2.7 | 4.6 | .2 | 70 | 44 | 204 | 6 | 1 | 160 | .0 | 438 | 2500 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Cincinnati, Ohio
Operated by U.S. Geological Survey

MAJOR BASIN Ohio River

MINOR BASIN Ohio River-Main Stem & Minor Trib.

STATION LOCATION Ohio River at
Cincinnati, Ohio

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13.800 | 20.000 | 90.500 | 80.500 | 192.000 | 551.000 | 233.000 | 66.400 | 42.500 | 14.800 | 31.000 | 10.500 |
| 2 | 17.800 | 27.600 | 53.400 | 58.700 | 167.000 | 588.000 | 261.000 | 77.800 | 42.200 | 16.600 | 29.700 | 12.900 |
| 3 | 15.800 | 38.100 | 47.200 | 40.000 | 142.000 | 578.000 | 271.000 | 77.600 | 33.300 | 18.800 | 23.100 | 27.600 |
| 4 | 14.700 | 29.300 | 39.800 | 45.000 | 110.000 | 536.000 | 259.000 | 79.700 | 21.200 | 45.600 | 15.100 | 17.300 |
| 5 | 15.200 | 30.000 | 37.100 | 52.700 | 116.000 | 472.000 | 240.000 | 77.000 | 31.400 | 48.400 | 15.000 | 9.620 |
| 6 | 14.100 | 28.900 | 37.900 | 72.900 | 106.000 | 414.000 | 210.000 | 73.400 | 39.700 | 49.500 | 16.200 | 15.400 |
| 7 | 13.300 | 28.800 | 40.400 | 101.000 | 115.000 | 357.000 | 194.000 | 70.200 | 41.200 | 38.000 | 20.900 | 10.800 |
| 8 | 26.800 | 26.000 | 45.200 | 145.000 | 116.000 | 294.000 | 212.000 | 57.300 | 39.700 | 37.900 | 18.700 | 10.700 |
| 9 | 12.400 | 33.800 | 47.200 | 204.000 | 116.000 | 250.000 | 252.000 | 49.600 | 33.200 | 37.500 | 30.000 | 11.700 |
| 10 | 6.810 | 27.300 | 63.100 | 219.000 | 118.000 | 228.000 | 259.000 | 48.900 | 32.900 | 30.700 | 17.400 | 14.300 |
| 11 | 9.670 | 18.900 | 78.200 | 214.000 | 111.000 | 221.000 | 255.000 | 45.900 | 26.300 | 28.500 | 15.100 | 11.900 |
| 12 | 15.300 | 15.900 | 87.500 | 187.000 | 124.000 | 221.000 | 251.000 | 43.500 | 38.800 | 19.200 | 15.000 | 8.440 |
| 13 | 10.100 | 20.300 | 101.000 | 146.000 | 120.000 | 222.000 | 267.000 | 43.500 | 34.600 | 14.500 | 17.700 | 8.380 |
| 14 | 17.200 | 28.000 | 118.000 | 113.000 | 105.000 | 242.000 | 302.000 | 45.600 | 46.500 | 15.400 | 11.800 | 9.500 |
| 15 | 17.700 | 25.400 | 137.000 | 90.700 | 94.700 | 264.000 | 322.000 | 40.100 | 53.700 | 41.500 | 13.900 | 12.800 |
| 16 | 9.030 | 26.000 | 131.000 | 68.900 | 90.700 | 283.000 | 313.000 | 37.900 | 61.600 | 53.700 | 15.000 | 8.380 |
| 17 | 11.900 | 41.700 | 120.000 | 73.400 | 85.000 | 280.000 | 285.000 | 39.700 | 55.300 | 49.200 | 14.000 | 10.600 |
| 18 | 12.000 | 50.500 | 118.000 | 87.200 | 80.000 | 252.000 | 245.000 | 36.400 | 41.500 | 33.200 | 13.900 | 10.700 |
| 19 | 10.100 | 58.600 | 156.000 | 99.400 | 90.500 | 218.000 | 217.000 | 36.100 | 31.900 | 34.100 | 13.800 | 8.540 |
| 20 | 22.600 | 47.200 | 221.000 | 101.000 | 91.600 | 183.000 | 192.000 | 33.400 | 32.200 | 17.700 | 15.000 | 13.000 |
| 21 | 25.400 | 37.400 | 246.000 | 91.600 | 87.000 | 184.000 | 169.000 | 43.400 | 28.900 | 13.300 | 13.900 | 9.520 |
| 22 | 36.900 | 26.400 | 230.000 | 110.000 | 101.000 | 210.000 | 151.000 | 35.400 | 29.400 | 18.300 | 10.600 | 8.500 |
| 23 | 58.600 | 40.100 | 189.000 | 146.000 | 112.000 | 250.000 | 137.000 | 35.100 | 41.000 | 27.200 | 10.600 | 8.500 |
| 24 | 55.900 | 57.600 | 157.000 | 200.000 | 170.000 | 290.000 | 123.000 | 30.900 | 54.200 | 16.700 | 10.600 | 9.570 |
| 25 | 45.000 | 71.400 | 140.000 | 251.000 | 206.000 | 311.000 | 111.000 | 30.100 | 36.800 | 30.900 | 12.800 | 11.700 |
| 26 | 40.000 | 105.000 | 128.000 | 254.000 | 288.000 | 307.000 | 104.000 | 37.600 | 28.200 | 25.100 | 10.600 | 10.500 |
| 27 | 30.100 | 145.000 | 108.000 | 238.000 | 396.000 | 290.000 | 96.700 | 50.400 | 30.000 | 24.100 | 11.800 | 11.500 |
| 28 | 20.100 | 152.000 | 94.300 | 208.000 | 496.000 | 257.000 | 92.300 | 56.700 | 26.200 | 14.000 | 9.690 | 26.700 |
| 29 | 14.800 | 136.000 | 91.100 | 201.000 |  | 225.000 | 81.900 | 39.000 | 20.800 | 17.400 | 7.960 | 28.800 |
| 30 | 21.600 | 115.000 | 93.900 | 213.000 |  | 193.000 | 67.300 | 49.300 | 13.700 | 19.000 | 9.520 | 13.400 |
| 31 | 21.800 |  | 93.000 | 211.000 |  | 199.000 |  | 52.600 |  | 30.100 | 8.380 |  |

| DATE SAMPLE TAKEN | | | DATE OF DETERMINATION | | RADIOACTIVITY IN WATER | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 13 | - | - | - | - | - | - | 5 | 9 | 8 | 11 | 13 | 14 | | | | | | |
| 10 | 9 | 61 | 10 | 18 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 8 | 15 | 10 | 21 | 13 | | | | | | |
| 10 | 16 | 61 | 10 | 25 | - | - | - | - | - | - | 7 | 8 | 12 | 10 | 19 | 13 | | | | | | |
| 10 | 23 | 61 | 11 | 1 | - | - | - | - | - | - | 10 | 11 | 14 | 13 | 24 | 17 | | | | | | |
| 11 | 13 | 61 | 11 | 24 | 0 | 1 | 0 | 2 | 0 | 2 | 8 | 10 | 13 | 14 | 21 | 17 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | - | - | - | - | - | - | 8 | 11 | 14 | 14 | 22 | 18 | | | | | | |
| 11 | 27 | 61 | 12 | 5 | - | - | - | - | - | - | 50 | 9 | 12 | 6 | 62 | 11 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | - | - | - | - | - | - | 5 | 4 | 15 | 5 | 20 | 6 | | | | | | |
| 12 | 11 | 61 | 12 | 18 | 0 | 1 | 0 | 1 | 0 | 1 | 25 | 5 | 10 | 6 | 35 | 8 | | | | | | |
| 12 | 18 | 61 | 12 | 28 | - | - | - | - | - | - | 18 | 7 | 16 | 7 | 34 | 10 | | | | | | |
| 12 | 26 | 61 | 1 | 3 | - | - | - | - | - | - | 22 | 7 | 19 | 7 | 41 | 10 | | | | | | |
| 2 | 12 | 62 | 2 | 21 | 0 | 1 | 0 | 1 | 0 | 1 | 22 | 5 | 15 | 5 | 37 | 7 | | | | | | |
| 2 | 19 | 62 | 3 | 2 | - | - | - | - | - | - | 14 | 4 | 14 | 5 | 28 | 6 | | | | | | |
| 2 | 26 | 62 | 3 | 9 | - | - | - | - | - | - | 135 | 24 | 37 | 9 | 172 | 26 | | | | | | |
| 3 | 5 | 62 | 3 | 14 | - | - | - | - | - | - | 69 | 11 | 22 | 6 | 91 | 13 | | | | | | |
| 3 | 12 | 62 | 3 | 22 | 1 | 1 | 0 | 1 | 1 | 1 | 24 | 5 | 19 | 5 | 43 | 7 | | | | | | |
| 3 | 19 | 62 | 4 | 4 | - | - | - | - | - | - | 41 | 8 | 16 | 7 | 57 | 11 | | | | | | |
| 3 | 26 | 62 | 4 | 3 | - | - | - | - | - | - | 55 | 8 | 11 | 5 | 66 | 9 | | | | | | |
| 4 | 2 | 62 | 4 | 12 | - | - | - | - | - | - | 97 | 11 | 66 | 7 | 163 | 13 | | | | | | |
| 4 | 9 | 62 | 4 | 25 | 0 | 1 | 1 | 1 | 1 | 1 | 46 | 11 | 13 | 5 | 59 | 12 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 32 | 8 | 19 | 7 | 51 | 11 | | | | | | |
| 4 | 23 | 62 | 5 | 23 | - | - | - | - | - | - | 15 | 8 | 11 | 8 | 26 | 11 | | | | | | |
| 4 | 30 | 62 | 5 | 31 | - | - | - | - | - | - | 13 | 7 | 9 | 9 | 22 | 11 | | | | | | |
| 5 | 7 | 62 | 7 | 11 | - | - | - | - | - | - | 5 | 6 | 16 | 8 | 21 | 10 | | | | | | |
| 5 | 14 | 62 | 6 | 20 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 5 | 7 | 8 | 10 | 9 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | - | - | - | - | - | - | 1 | 6 | 17 | 9 | 18 | 11 | | | | | | |
| 5 | 28 | 62 | 6 | 29 | - | - | - | - | - | - | 1 | 3 | 14 | 4 | 15 | 5 | | | | | | |
| 6 | 4 | 62 | 7 | 2 | - | - | - | - | - | - | 1 | 10 | 26 | 13 | 27 | 16 | | | | | | |
| 6 | 11 | 62 | 7 | 9 | 0 | 1 | 1 | 2 | 1 | 2 | 2 | 6 | 19 | 9 | 21 | 11 | | | | | | |
| 6 | 18 | 62 | 8 | 13 | - | - | - | - | - | - | 66 | 7 | 23 | 12 | 89 | 14 | | | | | | |
| 6 | 27 | 62 | 9 | 7 | - | - | - | - | - | - | 2 | 5 | 13 | 8 | 15 | 9 | | | | | | |
| 7 | 5 | 62 | 8 | 3 | - | - | - | - | - | - | 1 | 3 | 5 | 4 | 6 | 5 | | | | | | |
| 7 | 12 | 62 | 8 | 17 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 5 | 23 | 8 | 25 | 9 | | | | | | |
| 7 | 30 | 62 | 8 | 22 | - | - | - | - | - | - | 0 | 6 | 14 | 8 | 14 | 10 | | | | | | |
| 8 | 13 | 62 | 8 | 23 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 5 | 12 | 8 | 14 | 9 | | | | | | |
| 8 | 20 | 62 | 9 | 5 | - | - | - | - | - | - | 0 | 2 | 6 | 4 | 6 | 4 | | | | | | |
| 9 | 4 | 62 | 9 | 30 | - | - | - | - | - | - | 0 | 11 | 1 | 10 | 1 | 15 | | | | | | |
| 9 | 10 | 62 | 9 | 25 | 0 | 1 | 0 | 2 | 0 | 2 | 9 | 11 | 38 | 18 | 47 | 21 | | | | | | |
| 9 | 17 | 62 | 10 | 8 | - | - | - | - | - | - | 15 | 10 | 31 | 13 | 46 | 16 | | | | | | |
| 9 | 24 | 62 | 10 | 16 | - | - | - | - | - | - | 2 | 11 | 8 | 14 | 10 | 18 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** WEST VIRGINIA
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.
**STATION LOCATION** OHIO RIVER AT
HUNTINGTON, WEST VIRGINIA 38

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 1600 | 0 | 100 | 350 | 0 | 40 | 0 | 870 | 210 | 40 | 20 | 69 | 2 | 68 | 2 | 71 | 1 | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 2100 | 20 | 20 | 790 | 0 | 120 | 0 | 870 | 230 | 330 | 210 | 71 | 2 | 69 | 2 | 31 | 1 | 40 | 1 | | | | | | | | | | | | |
| 11 | 6 | 61 | 2400 | 40 | 0 | 370 | 0 | 250 | 170 | 1100 | 460 | 290 | 270 | 69 | 2 | 51 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 11 | 13 | 61 | 1100 | 0 | 20 | 330 | 0 | 60 | 40 | 520 | 150 | 100 | 20 | 69 | 1 | 68 | 1 | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 1700 | 0 | 110 | 420 | 0 | 60 | 0 | 630 | 510 | 50 | 340 | 68 | 2 | 92 | 2 | 25 | 1 | 38 | 1 | | | | | | | | | | | | |
| 12 | 4 | 61 | 1900 | 70 | 50 | 650 | 0 | 20 | 0 | 560 | 560 | 90 | 180 | 38 | 2 | 69 | 2 | 68 | 1 | 92 | 1 | | | | | | | | | | | | |
| 12 | 18 | 61 | 900 | 0 | 0 | 40 | 0 | 0 | 0 | 150 | 700 | 80 | 250 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 400 | 0 | 0 | 50 | 0 | 20 | 0 | 50 | 250 | 0 | 110 | | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 400 | 0 | 0 | 40 | 0 | 60 | 0 | 60 | 230 | 0 | 80 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 500 | 0 | 0 | 50 | 0 | 0 | 0 | 50 | 380 | 110 | 140 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 600 | 0 | 20 | 0 | 0 | 60 | 0 | 270 | 210 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 700 | 0 | 0 | 0 | 0 | 40 | 0 | 100 | 600 | 60 | 270 | 92 | 1 | 82 | 1 | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 1700 | 0 | 0 | 40 | 0 | 60 | 80 | 170 | 1300 | 150 | 370 | 92 | 2 | 82 | 1 | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 800 | 0 | 0 | 0 | 0 | 20 | 0 | 120 | 620 | 20 | 0 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 500 | 0 | 0 | 0 | 0 | 40 | 20 | 50 | 420 | 20 | 340 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 5100 | 0 | 270 | 590 | 0 | 130 | 110 | 3190 | 870 | 1060 | 360 | 71 | 4 | 68 | 4 | 69 | 2 | 92 | 2 | 38 | 2 | 17 | 1 | 77 | 1 | | | | | | |
| 5 | 21 | 62 | 3300 | 0 | 130 | 660 | 0 | 250 | 80 | 230 | 1930 | 270 | 120 | 92 | 4 | 77 | 2 | 38 | 1 | 51 | 1 | 68 | 1 | | | | | | | | | | |
| 6 | 4 | 62 | 8600 | 210 | 60 | 2340 | 270 | 600 | 100 | 3660 | 1370 | 810 | 40 | 68 | 4 | 71 | 4 | 92 | 3 | 25 | 3 | 69 | 2 | 38 | 2 | 40 | 2 | 51 | 2 | 50 | 1 | 3 | 1 |
| 6 | 18 | 62 | 33100 | 300 | 170 | 9370 | 510 | 0 | 130 | 18950 | 3670 | 7010 | 1770 | 58 | 7 | 38 | 6 | 71 | 5 | 69 | 5 | 92 | 5 | 24 | 3 | 77 | 3 | 45 | 1 | 30 | 1 | 44 | 1 |
| 7 | 5 | 62 | 9100 | 210 | 420 | 1810 | 210 | 210 | 0 | 4220 | 2030 | 2030 | 680 | 71 | 5 | 92 | 4 | 69 | 3 | 38 | 3 | 17 | 1 | 39 | 1 | 3 | 1 | 50 | 1 | 51 | 1 | | |
| 7 | 30 | 62 | 2600 | 110 | 0 | 400 | 0 | 210 | 0 | 1270 | 590 | 340 | 340 | 68 | 3 | 69 | 2 | 92 | 1 | 88 | 1 | 31 | 1 | 51 | 1 | | | | | | | | |
| 8 | 13 | 62 | 2900 | 190 | 370 | 410 | 0 | 270 | 60 | 1370 | 250 | 170 | 210 | 69 | 3 | 15 | 2 | 51 | 1 | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 6500 | 100 | 1780 | 1470 | 0 | 790 | 80 | 1530 | 700 | 290 | 370 | 22 | 3 | 68 | 3 | 51 | 3 | 11 | 2 | 92 | 2 | 15 | 2 | 69 | 2 | 38 | 2 | 24 | 1 | 71 | 1 |
| 9 | 4 | 62 | 5700 | 40 | 1350 | 1240 | 320 | 40 | 0 | 1140 | 1560 | 80 | 640 | 92 | 3 | 68 | 3 | 88 | 2 | 24 | 2 | 15 | 2 | 16 | 2 | 38 | 2 | 11 | 2 | 50 | 2 | 69 | 1 |
| 9 | 17 | 62 | 3100 | 40 | 830 | 770 | 0 | 410 | 80 | 660 | 330 | 40 | 120 | 16 | 2 | 51 | 2 | 38 | 1 | 69 | 1 | 15 | 1 | 31 | 1 | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 56 | 49 | 58 | 37 | 89 | 4 | 92 | 2 | 8 | 0 | 20 | 65 | 11 | 3 | 22 | 2 | 17 | 1 | | | | | 17 | 76 | 2 | 50 | 2 | | | 0 | 0 |
| 10 | 16 | 61 | 82 | 27 | 58 | 18 | 56 | 15 | 89 | 9 | 31 | 0 | 20 | 267 | 11 | 5 | 17 | 4 | 21 | 3 | 2 | 2 | 14 | 1 | 14 | 50 | 2 | 51 | 1 | 76 | 1 | 0 | 0 |
| 11 | 6 | 61 | 56 | 62 | 89 | 8 | 58 | 7 | 26 | 4 | 19 | 0 | 10 | 61 | 11 | 4 | | | | | | | | | 9 | 50 | 1 | 51 | 1 | | | 1 | 0 |
| 11 | 13 | 61 | 56 | 81 | 58 | 6 | 89 | 2 | 26 | 2 | 9 | 0 | 30 | 188 | 11 | 4 | 17 | 4 | 18 | 4 | 2 | 2 | 46 | 1 | 15 | 50 | 3 | 51 | 1 | | | 0 | 0 |
| 11 | 20 | 61 | 56 | 44 | 89 | 36 | 26 | 6 | 58 | 2 | 12 | 70 | 0 | 30 | 11 | 2 | 17 | 1 | | | | | | | 3 | | | | | | | 1 | 0 |
| 12 | 4 | 61 | 56 | 45 | 57 | 7 | 92 | 6 | 89 | 6 | 37 | 160 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 56 | 28 | 47 | 17 | 62 | 11 | 92 | 7 | 37 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 56 | 10 | 92 | 9 | 89 | 6 | 26 | 5 | 70 | 70 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 1 | 15 | 62 | 56 | 26 | 89 | 17 | 92 | 14 | 36 | 4 | 39 | 60 | 0 | 4 | | | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 2 | 5 | 62 | 26 | 21 | 92 | 15 | 36 | 10 | 65 | 5 | 49 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 1 |
| 2 | 19 | 62 | | | | | | | | | | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 92 | 21 | 62 | 9 | 26 | 8 | 36 | 5 | 57 | 100 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 92 | 11 | 26 | 9 | 36 | 7 | 82 | 7 | 66 | 80 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 92 | 13 | 56 | 9 | 26 | 8 | 65 | 6 | 64 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 89 | 8 | 92 | 8 | 56 | 7 | 36 | 7 | 70 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 82 | 22 | 27 | 15 | 9 | 11 | 57 | 11 | 41 | 20 | 0 | 88 | 2 | 4 | 11 | 3 | 21 | 1 | | | | | 2 | | | | | | | 0 | 1 |
| 5 | 21 | 62 | 92 | 72 | 45 | 7 | 9 | 6 | 26 | 3 | 12 | 60 | 20 | 175 | 11 | 8 | 2 | 5 | 17 | 5 | 21 | 4 | 46 | 1 | 22 | 50 | 3 | 76 | 2 | 51 | 1 | 0 | 1 |
| 6 | 4 | 62 | 56 | 26 | 92 | 19 | 28 | 16 | 82 | 16 | 23 | 480 | 0 | 232 | 46 | 5 | 2 | 4 | 11 | 3 | 15 | 2 | 22 | 1 | 58 | 76 | 4 | 50 | 3 | 51 | 2 | 0 | 0 |
| 6 | 18 | 62 | 56 | 43 | 58 | 17 | 92 | 16 | 57 | 7 | 17 | 590 | 0 | 381 | 11 | 6 | 2 | 4 | 22 | 3 | 46 | 3 | 17 | 2 | 34 | 50 | 4 | 76 | 2 | | | 0 | 0 |
| 7 | 5 | 62 | 56 | 39 | 28 | 17 | 92 | 15 | 26 | 6 | 23 | 130 | 0 | 69 | 11 | 4 | 17 | 2 | 22 | 1 | | | | | 77 | 76 | 3 | 50 | 3 | 73 | 2 | 1 | 0 |
| 7 | 30 | 62 | 56 | 78 | 26 | 5 | 27 | 4 | 58 | 4 | 9 | 0 | 0 | 29 | 17 | 2 | 11 | 1 | 22 | 1 | | | | | 23 | 51 | 2 | 53 | 2 | | | 0 | 0 |
| 8 | 13 | 62 | 56 | 75 | 26 | 9 | 47 | 7 | 57 | 3 | 6 | 0 | 0 | 49 | 22 | 2 | 2 | 2 | 17 | 1 | 21 | 1 | | | 18 | 50 | 3 | 53 | 2 | | | 0 | 0 |
| 8 | 20 | 62 | 56 | 47 | 58 | 19 | 26 | 15 | 92 | 6 | 13 | 0 | 0 | 5 | | | | | | | | | | | 8 | 51 | 2 | | | | | 0 | 0 |
| 9 | 4 | 62 | 56 | 67 | 26 | 8 | 58 | 8 | 92 | 5 | 12 | 0 | 0 | 73 | 11 | 3 | 22 | 2 | 17 | 1 | | | | | 47 | 50 | 4 | 51 | 3 | 52 | 2 | 0 | 0 |
| 9 | 4 | 62 | 56 | 67 | 26 | 8 | 58 | 8 | 92 | 5 | 12 | 0 | 0 | 73 | 11 | 3 | 22 | 2 | 17 | 1 | | | | | 47 | 50 | 4 | 51 | 3 | 52 | 2 | – | – |
| 9 | 17 | 62 | 56 | 45 | 26 | 14 | 58 | 8 | 28 | 5 | 28 | 0 | 0 | 327 | 11 | 6 | 22 | 4 | 18 | 4 | 17 | 3 | 2 | 2 | 83 | 50 | 5 | 76 | 3 | 51 | 2 | 0 | 0 |

**RESULTS IN MICROGRAMS PER LITER**
(Parts per billion)

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER AT
HUNTINGTON, WEST VIRGINIA 38

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 12 | 61 | 10 | 31 | 3022 | 638 | 317 | 321 | 13 | 70 | 111 | 3 | 6 | 85 | 17 | 29 | 51 | 3 | 40 |
| 11 | 13 | 61 | 12 | 1 | 2900 | 528 | 196 | 332 | 8 | 39 | 73 | 5 | 7 | 58 | 3 | 25 | 22 | 4 | 25 |
| 12 | 20 | 61 | 1 | 15 | 3172 | - | * | 41* | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 5 | 62 | 2 | 21 | 3592 | 246 | 116 | 130 | 2 | 22 | 55 | 12 | 8 | 33 | 2 | 12 | 7 | 2 | 16 |
| 3 | 4 | 62 | 3 | 19 | 3030 | 241 | 93 | 148 | 4 | 19 | 39 | 8 | 5 | 24 | 2 | 10 | 7 | 2 | 12 |
| 4 | 1 | 62 | 4 | 23 | 5022 | 152 | 90 | 62 | 7 | 20 | 33 | 6 | 5 | 22 | 0 | 8 | 7 | 1 | 14 |
| 6 | 4 | 62 | 6 | 27 | 2332 | 522 | 288 | 234 | 9 | 63 | 124 | 7 | 10 | 98 | 9 | 35 | 26 | 6 | 25 |
| 9 | 1 | 62 | 9 | 20 | 3232 | 614 | 292 | 322 | 6 | 76 | 99 | 3 | 4 | 91 | 1 | 35 | 32 | 6 | 38 |

* LABORATORY ACCIDENT

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** WEST VIRGINIA
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.
**STATION LOCATION** OHIO RIVER AT
HUNTINGTON, WEST VIRGINIA 38

| P. rees rade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1700 |
| .3 | 5.0 | 7.2 | - | - | - | - | .5 | 58 | 37 | 162 | 10 | 20 | 130 | - | 420 | - |
| .5 | 5.0 | 7.3 | - | 13 | - | - | .8 | 64 | 43 | 162 | 5 | 14 | 156 | - | 400 | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 190 |
| .3 | 5.0 | 7.0 | - | - | - | - | .7 | 72 | 36 | 202 | 10 | 16 | 192 | - | 420 | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2000 |
| .2 | 5.0 | 7.4 | - | - | - | - | .5 | 35 | 50 | 130 | 20 | 75 | 130 | - | 260 | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1200 |
| .0 | 7.5 | 7.0 | - | - | - | - | .4 | 39 | 29 | 140 | 15 | 29 | 144 | - | 280 | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 510 |
| 2.8 | 8.0 | 7.0 | - | - | - | - | .6 | 56 | 33 | 158 | 10 | 25 | 163 | - | 370 | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 140 |
| .6 | 9.0 | 6.9 | - | 19 | - | - | .6 | 49 | 25 | 160 | 10 | 24 | 187 | - | 360 | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 420 |
| .0 | 10.5 | 7.1 | - | - | - | - | .7 | 64 | 33 | 202 | 15 | 25 | 250 | - | 460 | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | .1 | - | 13000 |
| .5 | 10.5 | 7.0 | - | - | - | - | .6 | 30 | 36 | 142 | 15 | 120 | 149 | - | 260 | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | *10 |
| .7 | 7.0 | 7.1 | - | - | - | - | .4 | 35 | 36 | 104 | 30 | 100 | 120 | - | 220 | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | .1 | - | - |
| .0 | 2.0 | 7.0 | - | - | - | - | .5 | 15 | 30 | 82 | 15 | 500 | 82 | - | 200 | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 36 |
| .0 | 9.0 | 7.0 | - | - | - | - | .4 | 17 | 28 | 90 | 15 | 75 | 67 | - | 160 | - |
| - | - | - | - | 8 | - | - | - | - | - | - | - | - | - | - | - | 18 |
| 2.8 | 9.0 | 7.2 | - | - | - | - | 1.0 | 19 | 29 | 90 | 15 | 30 | 77 | - | 180 | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1900 |
| .5 | 6.0 | 7.0 | - | - | - | - | .3 | 15 | 33 | 108 | 15 | 270 | 67 | - | 120 | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 150 |
| 1.2 | 11.5 | 6.9 | - | - | - | - | .5 | 19 | 25 | 92 | 20 | 75 | 82 | - | - | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 490 |
| 2.4 | 12.3 | 6.9 | - | - | - | - | .5 | 17 | 30 | 92 | 20 | 350 | 101 | - | 180 | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 490 |
| 1.6 | 11.3 | 6.9 | - | - | - | - | .3 | 16 | 26 | 94 | 20 | 280 | 72 | - | 200 | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 330 |
| 1.6 | 11.7 | 7.0 | - | - | - | - | .3 | 18 | 28 | 93 | 10 | 85 | 82 | - | 160 | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 60 |
| .2 | 10.5 | 7.0 | - | - | - | - | .3 | 17 | 28 | 83 | 10 | 65 | - | - | 120 | - |
| .2 | 10.1 | 7.0 | - | - | - | - | .5 | 17 | 26 | 111 | 10 | 37 | - | - | 180 | - |

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** WEST VIRGINIA
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.
**STATION LOCATION** OHIO RIVER AT
HUNTINGTON, WEST VIRGINIA 38

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 2 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .1 | - | - |
| 2 | 28 | 62 | 7.3 | .1 | 7.0 | - | - | - | - | .4 | 12 | 28 | 73 | 20 | 700 | 70 | - | 180 | - |
| 3 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 30000 |
| 3 | 7 | 62 | 5.4 | 12.0 | 6.8 | - | - | - | - | .3 | 17 | 27 | 93 | 30 | 240 | 58 | - | 140 | - |
| 3 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 3 | 14 | 62 | 6.7 | 11.3 | 7.0 | - | 24 | - | - | .3 | 16 | 29 | 86 | 20 | 240 | 70 | - | 180 | - |
| 3 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1500 |
| 3 | 21 | 62 | 7.2 | 8.7 | 7.1 | - | - | - | - | .3 | 20 | 26 | 90 | 15 | 190 | 55 | - | 200 | - |
| 3 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 490 |
| 3 | 28 | 62 | 11.5 | 8.0 | 6.9 | - | - | - | - | .3 | 13 | 22 | 74 | 25 | 200 | 50 | - | 180 | - |
| 4 | 4 | 62 | 10.2 | 7.4 | 6.9 | - | - | - | - | .3 | 14 | 26 | 92 | 20 | 140 | 55 | - | 140 | - |
| 4 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 550 |
| 4 | 11 | 62 | 10.8 | 5.2 | 6.9 | - | - | - | - | .4 | 11 | 25 | 90 | 20 | 130 | - | - | 100 | - |
| 4 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 54 | .1 | - | 1100 |
| 4 | 18 | 62 | 11.8 | 7.5 | 6.9 | - | 10 | - | - | .3 | 15 | 27 | 80 | 15 | 105 | - | - | 160 | - |
| 4 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 4 | 25 | 62 | 12.2 | 5.5 | 7.0 | - | - | - | - | .3 | - | 27 | - | 15 | 75 | - | - | 200 | - |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 5 | 2 | 62 | 18.4 | 5.2 | 7.1 | - | - | - | - | .3 | 12 | 32 | 118 | 10 | 20 | - | - | 170 | - |
| 5 | 9 | 62 | 18.8 | - | 7.2 | - | - | - | - | .4 | 20 | 35 | 120 | 10 | 20 | - | - | 200 | - |
| 5 | 14 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 5 | 16 | 62 | 21.8 | 6.2 | 7.2 | - | - | - | - | .9 | 42 | 34 | 140 | 5 | 25 | - | - | 260 | - |
| 5 | 21 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 190 |
| 5 | 23 | 62 | 22.2 | 5.5 | 7.0 | - | - | - | - | .6 | 36 | 38 | 160 | 5 | 20 | - | - | 280 | - |
| 5 | 30 | 62 | 23.3 | - | 7.1 | - | - | - | - | .5 | 38 | 36 | 142 | 5 | 18 | - | - | 280 | - |
| 6 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 6 | 6 | 62 | 23.3 | 4.0 | 7.1 | - | - | - | - | .5 | 40 | 37 | 148 | 10 | 14 | - | - | 280 | - |
| 6 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 6 | 20 | 62 | 24.6 | 5.8 | 7.2 | - | - | - | - | .4 | 47 | 27 | 154 | 10 | 28 | - | - | 360 | - |
| 6 | 27 | 62 | 28.0 | 5.0 | 7.1 | - | - | - | - | .5 | 38 | 25 | 142 | 5 | 20 | - | - | 300 | - |
| 7 | 4 | 62 | 28.0 | 5.4 | 7.0 | - | - | - | - | .4 | 47 | 21 | 154 | 10 | 16 | - | - | 280 | - |
| 7 | 11 | 62 | 29.0 | 6.2 | 7.1 | - | - | - | - | .4 | 52 | 25 | 154 | 10 | 15 | - | - | 260 | - |
| 7 | 18 | 62 | 29.4 | 5.8 | 7.2 | - | - | - | - | .4 | 52 | 24 | 166 | 15 | 40 | - | - | 260 | - |
| 7 | 25 | 62 | 28.6 | 5.6 | 7.2 | - | - | - | - | .4 | 58 | 25 | 172 | 15 | 20 | 139 | - | 220 | - |
| 7 | 30 | 62 | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 1 | 62 | 29.2 | 5.0 | 7.2 | - | - | - | - | .4 | 61 | 26 | 170 | 20 | 40 | - | - | 200 | - |
| 8 | 8 | 62 | 28.8 | 4.6 | 7.1 | - | - | - | - | .4 | 58 | 27 | 164 | 10 | 17 | - | - | 200 | - |
| 8 | 15 | 62 | 29.2 | 4.2 | 7.1 | - | - | - | - | .4 | 61 | 29 | 170 | 10 | 18 | - | - | 180 | - |
| 8 | 22 | 62 | 29.4 | 4.8 | 7.2 | - | - | - | - | .5 | 64 | 30 | 178 | 10 | 20 | - | - | 160 | - |

| DATE OF SAMPLE |  |  | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND |  | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR |  |  |  |  |  | 1-HOUR mg/l | 24-HOUR mg/l |  |  |  |  |  |  |  |  |  |  |
| 8 | 29 | 62 | 28.6 | 5.0 | 7.2 | - | - | - | - | .4 | 67 | 30 | 184 | 5 | 12 | - | - | 160 | - |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 660 |
| 9 | 5 | 62 | 27.2 | 4.0 | 7.1 | - | - | - | - | .2 | - | 32 | 220 | 15 | 16 | - | - | 360 | - |
| 9 | 10 | 62 | - | - | - | - | 7 | - | - | - | - | - | - | - | - | - | - | - | 70 |
| 9 | 12 | 62 | 25.2 | 4.2 | 7.0 | - | - | - | - | .4 | - | 35 | 218 | 5 | 14 | - | - | 110 | - |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 9 | 19 | 62 | 22.2 | 1.5 | 7.0 | - | - | - | - | 1.0 | 78 | 35 | 202 | 5 | 14 | - | - | 260 | - |
| 9 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 130 |
| 9 | 26 | 62 | 21.6 | 2.4 | 7.3 | - | - | - | - | .9 | 78 | 37 | 210 | 5 | 9 | 226 | - | 520 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Huntington, West Virginia
Operated by U.S. Geological Survey

STATE West Virginia
MAJOR BASIN Ohio River
MINOR BASIN Ohio River-Main Stem and Minor Trib.
STATION LOCATION Ohio River at
Huntington, West Virginia

| October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|

DATA NOT AVAILABLE AT PRESENT TIME

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER BELOW
ADDISON, OHIO 117

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 6 | 12 | 62 | 7 | 14 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 6 | 15 | 9 | 16 | 11 | | | | | | | |
| 6 | 19 | 62 | 7 | 17 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 10 | 40 | 34 | 44 | 35 | | | | | | | |
| 6 | 26 | 62 | 9 | 9 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 5 | 6 | 8 | 7 | 9 | | | | | | | |
| 7 | 3 | 62 | 8 | 2 | 0 | 1 | 1 | 2 | 1 | 2 | 7 | 11 | 16 | 14 | 23 | 18 | | | | | | | |
| 7 | 10 | 62 | 8 | 17 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 10 | 13 | 13 | 19 | 16 | | | | | | | |
| 7 | 17 | 62 | 8 | 13 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 6 | 19 | 8 | 23 | 10 | | | | | | | |
| 7 | 24 | 62 | 8 | 10 | 0 | 9 | 0 | 9 | 0 | 13 | 2 | 11 | 13 | 14 | 15 | 18 | | | | | | | |
| 7 | 31 | 62 | 8 | 21 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 10 | 19 | 13 | 21 | 16 | | | | | | | |
| 8 | 7 | 62 | 8 | 23 | 0 | 1 | 0 | 2 | 0 | 2 | 19 | 13 | 1 | 16 | 20 | 20 | | | | | | | |
| 8 | 14 | 62 | 9 | 19 | 0 | 1 | 0 | 1 | 0 | 1 | 10 | 12 | 14 | 8 | 24 | 14 | | | | | | | |
| 8 | 21 | 62 | 9 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 5 | 2 | 8 | 2 | 9 | | | | | | | |
| 8 | 28 | 62 | 9 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 17 | 13 | 21 | 18 | 38 | 22 | | | | | | | |
| 9 | 4 | 62 | 9 | 17 | 0 | 1 | 0 | 0 | 0 | 1 | 10 | 9 | 12 | 14 | 22 | 17 | | | | | | | |
| 9 | 11 | 62 | 10 | 1 | 1 | 2 | 0 | 2 | 1 | 3 | 12 | 26 | 40 | 20 | 52 | 33 | | | | | | | |
| 9 | 17 | 62 | 10 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 13 | 23 | 19 | 30 | 23 | | | | | | | |
| 9 | 24 | 62 | 10 | 15 | 0 | 1 | 0 | 2 | 0 | 2 | 2 | 10 | 16 | 16 | 18 | 19 | | | | | | | |

**STATION LOCATION** OHIO RIVER BELOW

ADDISON, OHIO

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10 |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS |
| 6 | 19 | 62 | 31900 | 3690 | 0 | 15150 | 210 | 1820 | 120 | 7830 | 3110 | 1820 | 620 | 38 | 6 | 68 | 6 | 40 | 5 | 25 | 5 | 92 | 5 | 9 | 5 | 71 | 4 | 51 | 4 | 3 | 3 | 69 |
| 7 | 3 | 62 | 15400 | 1180 | 3550 | 5110 | 0 | 0 | 80 | 1350 | 4140 | 930 | 170 | 92 | 5 | 16 | 5 | 38 | 5 | 10 | 3 | 68 | 3 | 40 | 2 | 69 | 2 | 88 | 2 | 17 | 2 | |
| 7 | 17 | 62 | 3500 | 210 | 40 | 770 | 170 | 230 | 170 | 500 | 1410 | 170 | 120 | 92 | 3 | 68 | 1 | 88 | 1 | 51 | 1 | 77 | 1 | 44 | 1 | 39 | 1 | 38 | 1 | 3 | 1 | 50 |
| 8 | 7 | 62 | 1400 | 80 | 110 | 490 | 0 | 60 | 0 | 210 | 420 | 210 | 80 | 92 | 1 | 38 | 1 | 31 | 1 | | | | | | | | | | | | | |
| 8 | 21 | 62 | 2300 | 110 | 650 | 700 | 0 | 80 | 0 | 460 | 340 | 130 | 250 | 15 | 2 | 69 | 2 | 38 | 1 | | | | | | | | | | | | | |
| 9 | 4 | 62 | 9700 | 760 | 4350 | 2490 | 0 | 130 | 0 | 1310 | 630 | 300 | 420 | 16 | 5 | 68 | 3 | 38 | 2 | 40 | 2 | 69 | 2 | 92 | 2 | 24 | 2 | 25 | 1 | 88 | 1 | 2 |
| 9 | 17 | 62 | 2000 | 20 | 70 | 1420 | 0 | 50 | 0 | 270 | 160 | 290 | 180 | 26 | 2 | 38 | 2 | 24 | 1 | | | | | | | | | | | | | |

# PLANKTON POPULATION

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER BELOW

ADDISON, OHIO

117

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 6 | 19 | 62 | 56 | 52 | 92 | 15 | 26 | 11 | 58 | 5 | 17 | 0 | 0 | 2860 | 11 | 9 | 22 | 6 | 2 | 3 | 17 | 2 | | | 116 | 50 | 4 | 76 | 3 | 51 | 2 | 1 | 0 |
| 7 | 3 | 62 | 56 | 41 | 89 | 20 | 92 | 13 | 57 | 5 | 21 | 0 | 0 | 313 | 11 | 6 | 2 | 3 | 22 | 2 | 17 | 2 | | | 80 | 50 | 4 | 76 | 4 | 51 | 3 | 0 | 0 |
| 7 | 17 | 62 | 56 | 33 | 89 | 26 | 92 | 7 | 70 | 6 | 28 | 0 | 0 | 120 | 11 | 3 | 17 | 3 | 2 | 3 | 9 | 2 | 22 | 1 | 36 | 76 | 3 | 50 | 3 | 53 | 2 | 0 | 0 |
| 8 | 7 | 62 | 56 | 42 | 89 | 31 | 92 | 5 | 26 | 4 | 18 | 0 | 0 | 376 | 17 | 6 | 2 | 4 | 22 | 2 | 11 | 2 | 16 | 1 | 101 | 53 | 5 | 76 | 3 | 50 | 3 | 0 | 0 |
| 8 | 21 | 62 | 56 | 45 | 58 | 16 | 26 | 11 | 89 | 6 | 22 | 0 | 0 | 23 | 2 | 1 | 17 | 1 | 11 | 1 | | | | | 42 | 50 | 3 | 51 | 3 | 77 | 1 | 0 | 0 |
| 9 | 4 | 62 | 56 | 66 | 26 | 10 | 89 | 5 | 92 | 4 | 15 | 0 | 0 | 251 | 22 | 5 | 11 | 4 | 46 | 4 | 2 | 3 | 17 | 2 | 155 | 50 | 5 | 53 | 4 | 76 | 4 | 0 | 0 |
| 9 | 17 | 62 | 56 | 41 | 82 | 20 | 26 | 9 | 89 | 9 | 21 | 0 | 0 | 1670 | 11 | 8 | 17 | 7 | 46 | 5 | 2 | 5 | 22 | 4 | 54 | 50 | 4 | 76 | 4 | 52 | 1 | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** OHIO
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TR
**STATION LOCATION** OHIO RIVER BELOW
ADDISON, OHIO

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLOROFORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGENATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES |
| 6 | 4 | 62 | 6 | 13 | 5003 | 238 | 123 | 115 | 6 | 28 | 47 | 6 | 4 | 37 | 0 | 17 | 12 | 2 |
| 7 | 17 | 62 | 7 | 26 | 5039 | 222 | 118 | 104 | 1 | 18 | 45 | 5 | 3 | 35 | 2 | 15 | 10 | 2 |
| 8 | 16 | 62 | 8 | 27 | 5010 | 345 | 174 | 171 | 2 | 28 | 66 | 3 | 3 | 56 | 4 | 28 | 19 | 4 |
| 9 | 14 | 62 | 9 | 25 | 5103 | 352 | 119 | 233 | 2 | 22 | 45 | 1 | 2 | 39 | 3 | 18 | 14 | 2 |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** OHIO

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER BELOW

ADDISON, OHIO 117

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 12 | 62 | 28.2 | 7.1 | 7.5 | - | - | 2.6 | 5.9 | .5 | 39 | 28 | 190 | - | - | 158 | - | 328 | - |
| 6 | 19 | 62 | 26.5 | 8.0 | 7.3 | - | - | 2.8 | 5.9 | .5 | 37 | 21 | 191 | - | - | 183 | - | 359 | - |
| 6 | 26 | 62 | - | - | - | - | 11 | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 3 | 62 | 28.2 | 7.0 | 7.2 | - | - | 3.4 | 5.6 | 1.0 | 36 | 17 | 199 | - | - | 220 | - | 416 | - |
| 7 | 10 | 62 | 27.8 | 7.1 | 7.4 | - | - | 2.6 | 6.9 | .5 | 47 | 26 | 177 | - | - | 135 | - | 324 | - |
| 7 | 17 | 62 | 28.2 | 6.4 | 7.4 | - | - | 2.2 | 4.3 | .6 | 49 | 25 | 170 | - | - | 145 | - | 320 | - |
| 7 | 24 | 62 | 28.2 | 6.4 | 7.3 | - | - | 2.6 | 4.4 | 1.1 | 50 | 28 | 185 | - | - | 145 | - | 323 | - |
| 7 | 31 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 860 |
| 8 | 6 | 62 | 28.3 | 5.6 | 7.3 | - | - | 3.3 | 5.3 | 1.1 | 74 | 39 | 188 | - | - | 130 | - | 365 | - |
| 8 | 7 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 8 | 14 | 62 | 27.8 | 7.4 | 7.5 | - | - | 1.8 | 3.9 | .5 | 86 | 30 | 220 | - | - | 155 | - | 434 | 300 |
| 8 | 21 | 62 | 29.2 | 6.8 | 7.3 | - | - | 2.6 | 4.6 | .8 | 81 | 30 | 222 | - | - | 160 | - | 441 | 200 |
| 8 | 27 | 62 | - | - | - | - | 10 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 28 | 62 | 29.0 | 7.4 | 8.1 | - | - | 2.1 | 4.3 | .9 | 78 | 32 | 232 | 30 | - | 203 | - | 488 | 100 |
| 9 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 9 | 4 | 62 | 27.5 | 6.5 | 7.6 | - | 17 | 3.1 | 4.7 | .8 | 80 | 29 | 210 | 15 | 5 | 189 | - | 479 | - |
| 9 | 11 | 62 | 25.4 | 6.8 | 7.3 | - | - | 2.9 | 3.9 | 1.0 | 88 | 30 | 220 | 10 | 5 | 170 | - | 463 | 520 |
| 9 | 17 | 62 | 26.1 | 7.1 | 7.7 | - | 28 | 2.5 | 3.8 | 1.1 | 84 | 24 | 198 | 20 | 5 | 180 | - | 454 | 300 |
| 9 | 24 | 62 | 23.0 | 7.0 | 7.8 | - | 10 | 3.0 | 4.3 | 2.0 | 102 | 22 | 206 | 15 | 5 | 188 | - | 530 | 30 |
| 9 | 25 | 62 | - | - | - | - | 3 | - | - | - | - | - | - | - | - | - | - | - | - |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Pomeroy, Ohio
Operated by U.S. Geological Survey

| | |
|---|---|
| MAJOR BASIN | Ohio River |
| MINOR BASIN | Ohio River-Main Stem and Minor T |
| STATION LOCATION | Ohio River below<br>Addison, Ohio |

| October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|

DATA NOT AVAILABLE AT PRESENT TIME

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** OHIO

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER AT

EAST LIVERPOOL, OHIO 39

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 4 | 61 | 10 | 14 | - | - | - | - | - | - | 3 | 10 | 29 | 15 | 32 | 18 | | | | | | |
| 10 | 17 | 61 | 10 | 25 | - | - | - | - | - | - | 2 | 11 | 33 | 15 | 35 | 19 | | | | | | |
| 11 | 6 | 61 | 11 | 17 | - | - | - | - | - | - | 4 | 11 | 21 | 15 | 25 | 19 | | | | | | |
| 11 | 27 | 61 | 12 | 5 | 2 | 2 | 0 | 1 | 2 | 2 | 28 | 8 | 23 | 7 | 51 | 11 | | | | | | |
| 2 | 20 | 62 | 3 | 6 | 0 | 1 | 1 | 2 | 1 | 2 | 13 | 4 | 20 | 6 | 33 | 7 | | | | | | |
| 3 | 20 | 62 | 4 | 6 | 1 | 1 | 0 | 1 | 1 | 1 | 23 | 5 | 15 | 5 | 38 | 7 | | | | | | |
| 4 | 3 | 62 | 4 | 12 | - | - | - | - | - | - | 54 | 8 | 14 | 7 | 68 | 11 | | | | | | |
| 4 | 9 | 62 | 4 | 26 | 2 | 1 | 0 | 1 | 2 | 1 | 11 | 5 | 25 | 6 | 36 | 7 | | | | | | |
| 4 | 22 | 62 | 5 | 22 | - | - | - | - | - | - | 5 | 6 | 22 | 8 | 27 | 10 | | | | | | |
| 5 | 22 | 62 | 6 | 26 | 1 | 1 | 1 | 1 | 2 | 1 | 11 | 6 | 16 | 8 | 27 | 10 | | | | | | |
| 6 | 4 | 62 | 9 | 19 | - | - | - | - | - | - | 1 | 5 | 12 | 8 | 13 | 9 | | | | | | |
| 6 | 18 | 62 | 8 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 5 | 19 | 8 | 20 | 9 | | | | | | |
| 7 | 3 | 62 | 8 | 7 | - | - | - | - | - | - | 4 | 5 | 10 | 8 | 14 | 9 | | | | | | |

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 4 | 61 | 1100 | 20 | 0 | 350 | 20 | 250 | 0 | 190 | 270 | 20 | 40 | 68 | 1 | | | | | | | | | | | | | | | | | | |
| 10 | 17 | 61 | 10600 | 0 | 0 | 250 | 0 | 10290 | 0 | 40 | 0 | 20 | 0 | 51 | 7 | 24 | 1 | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 600 | 0 | 0 | 0 | 0 | 520 | 0 | 20 | 80 | 0 | 20 | 51 | 2 | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 400 | 0 | 40 | 40 | 0 | 130 | 0 | 20 | 120 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 5 | 61 | 100 | 0 | 0 | 20 | 0 | 20 | 0 | 20 | 0 | 40 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 200 | 0 | 0 | 0 | 0 | 20 | 0 | 40 | 150 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 1 | 3 | 62 | 100 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 40 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 1 | 17 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 20 | 70 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 150 | 40 | 40 | | | | | | | | | | | | | | | | | | | | |
| 3 | 20 | 62 | 1000 | 0 | 0 | 20 | 0 | 120 | 60 | 80 | 700 | 20 | 120 | 92 | 1 | 82 | 1 | | | | | | | | | | | | | | | | |
| 4 | 3 | 62 | 1600 | 0 | 0 | 40 | 0 | 40 | 20 | 120 | 1410 | 0 | 230 | 92 | 1 | 82 | 1 | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 1600 | 0 | 0 | 140 | 0 | 50 | 0 | 610 | 790 | 230 | 230 | 69 | 1 | 92 | 1 | 88 | 1 | | | | | | | | | | | | | | |
| 5 | 9 | 62 | 5300 | 0 | 150 | 510 | 0 | 610 | 0 | 1120 | 2930 | 420 | 1080 | 92 | 4 | 71 | 3 | 57 | 2 | 68 | 2 | 38 | 2 | 77 | 1 | 88 | 1 | | | | | | |
| 5 | 22 | 62 | 16400 | 0 | 3080 | 10210 | 0 | 210 | 840 | 970 | 1010 | 420 | 460 | 68 | 6 | 38 | 6 | 17 | 5 | 60 | 3 | 25 | 2 | 92 | 2 | 71 | 1 | 51 | 1 | | | | |
| 6 | 4 | 62 | 10800 | 0 | 930 | 8440 | 0 | 0 | 0 | 840 | 630 | 210 | 250 | 38 | 5 | 24 | 4 | 17 | 3 | 40 | 3 | 25 | 2 | 34 | 2 | 37 | 1 | 32 | 1 | 44 | 1 | 30 | 1 |
| 6 | 18 | 62 | 3000 | 0 | 130 | 720 | 0 | 0 | 0 | 1460 | 720 | 250 | 210 | 69 | 4 | 38 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 7 | 3 | 62 | 12500 | 510 | 510 | 4600 | 0 | 170 | 170 | 5360 | 1180 | 550 | 420 | 69 | 6 | 40 | 5 | 30 | 3 | 38 | 3 | 88 | 3 | 17 | 2 | 10 | 2 | 68 | 2 | 92 | 1 | 3 | 1 |
| 7 | 19 | 62 | 6200 | 0 | 0 | 3540 | 0 | 0 | 460 | 1820 | 380 | 250 | 130 | 38 | 4 | 68 | 3 | 69 | 3 | 62 | 2 | 40 | 2 | 29 | 1 | 26 | 1 | 25 | 1 | 30 | 1 | 44 | 1 |
| 8 | 9 | 62 | 10100 | 250 | 0 | 4540 | 0 | 1700 | 100 | 2550 | 950 | 540 | 290 | 38 | 5 | 68 | 4 | 51 | 4 | 40 | 2 | 24 | 2 | 71 | 1 | 92 | 1 | 87 | 1 | 37 | 1 | | |
| 8 | 21 | 62 | 4400 | 1480 | 0 | 1410 | 0 | 550 | 0 | 930 | 0 | 130 | 0 | 4 | 4 | 38 | 3 | 51 | 2 | 69 | 2 | 68 | 2 | 3 | 1 | 30 | 1 | 40 | 1 | | | | |
| 9 | 4 | 62 | 8200 | 0 | 0 | 970 | 0 | 270 | 60 | 5220 | 1700 | 1780 | 370 | 68 | 6 | 92 | 3 | 38 | 2 | 71 | 2 | 51 | 1 | 44 | 1 | 88 | 1 | 39 | 1 | 69 | 1 | | |
| 9 | 17 | 62 | 3400 | 0 | 40 | 1860 | 0 | 620 | 410 | 290 | 210 | 40 | 40 | 38 | 3 | 51 | 2 | 60 | 2 | 25 | 1 | 69 | 1 | 35 | 1 | | | | | | | | |

# PLANKTON POPULATION

**MAJOR BASIN** OHIO RIVER

**MINOR BASIN** OHIO RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** OHIO RIVER AT
EAST LIVERPOOL, OHIO 039

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 4 | 61 | 56 | 64 | 26 | 13 | 89 | 5 | 70 | 4 | 14 | 7140 | 0 | 55 | 18 | 3 | 17 | 1 | 11 | 1 | 2 | 1 | | | 14 | 76 | 2 | 50 | 1 | | | 0 | 0 |
| 10 | 17 | 61 | | | | | | | | | | 0 | 0 | 20 | 2 | 2 | | | | | | | | | 8 | 50 | 1 | 76 | 1 | | | 0 | 0 |
| 11 | 6 | 61 | 26 | 16 | 70 | 9 | 92 | 6 | 71 | 5 | 64 | 0 | 0 | 17 | 2 | 2 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | | | | | | | | | | 20 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 5 | 61 | 62 | 7 | 36 | 6 | 92 | 6 | 26 | 5 | 76 | 1660 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | | | | | | | | | | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 3 | 62 | | | | | | | | | | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 17 | 62 | 92 | 10 | 36 | 8 | 62 | 8 | 2 | 6 | 68 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 62 | 12 | 92 | 9 | 2 | 8 | 36 | 7 | 64 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 3 | 20 | 62 | 92 | 20 | 36 | 14 | 62 | 13 | 93 | 6 | 47 | 0 | 0 | 4 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 4 | 3 | 62 | 36 | 11 | 62 | 11 | 92 | 11 | 45 | 7 | 60 | 40 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 2 | 1 |
| 4 | 16 | 62 | 92 | 12 | 36 | 8 | 64 | 5 | 71 | 5 | 70 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 9 | 62 | 92 | 57 | 82 | 5 | 26 | 3 | 45 | 3 | 32 | 0 | 0 | 0 | | | | | | | | | | | 2 | | | | | | | 2 | 0 |
| 5 | 22 | 62 | 92 | 47 | 26 | 6 | 36 | 5 | 62 | 4 | 38 | 0 | 0 | 36 | 2 | 3 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 92 | 32 | 26 | 8 | 9 | 6 | 64 | 6 | 48 | 0 | 0 | 131 | 15 | 4 | 2 | 3 | 11 | 2 | | | | | 13 | 50 | 1 | 76 | 1 | | | 0 | 0 |
| 6 | 18 | 62 | 56 | 40 | 92 | 15 | 47 | 4 | 26 | 3 | 38 | 0 | 0 | 196 | 2 | 5 | 11 | 4 | | | | | | | 10 | 50 | 1 | 51 | 1 | | | 1 | 0 |
| 7 | 3 | 62 | 56 | 36 | 57 | 33 | 70 | 10 | 26 | 4 | 17 | 40 | 0 | 1410 | 11 | 8 | 17 | 5 | 22 | 3 | 2 | 2 | | | 45 | 76 | 4 | 50 | 3 | | | 0 | 0 |
| 7 | 19 | 62 | 57 | 38 | 56 | 38 | 26 | 6 | 47 | 3 | 15 | 40 | 0 | 344 | 11 | 6 | 17 | 4 | 15 | 2 | 18 | 2 | 2 | 1 | 86 | 76 | 4 | 51 | 4 | 50 | 4 | 0 | 0 |
| 8 | 9 | 62 | 26 | 46 | 56 | 32 | 57 | 12 | 58 | 2 | 8 | 0 | 0 | 137 | 11 | 4 | 22 | 3 | 18 | 3 | 17 | 3 | | | 26 | 51 | 3 | 50 | 2 | 76 | 2 | 0 | 0 |
| 8 | 21 | 62 | 56 | 80 | 26 | 6 | 92 | 4 | 57 | 3 | 7 | 0 | 0 | 290 | 11 | 5 | 17 | 5 | 16 | 2 | 2 | 2 | 15 | 1 | 174 | 51 | 5 | 76 | 2 | 50 | 1 | 0 | 0 |
| 9 | 4 | 62 | 56 | 45 | 26 | 20 | 57 | 10 | 92 | 10 | 15 | 0 | 0 | 267 | 11 | 5 | 17 | 3 | 2 | 3 | 18 | 3 | 7 | 2 | 134 | 51 | 5 | 50 | 4 | 76 | 3 | 0 | 0 |
| 9 | 17 | 62 | 56 | 54 | 57 | 24 | 26 | 7 | 82 | 3 | 12 | 0 | 0 | 549 | 11 | 7 | 17 | 4 | 18 | 3 | 2 | 3 | 21 | 1 | 210 | 51 | 5 | 50 | 5 | 76 | 4 | 0 | 0 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Sewickley, Pennsylvania
Operated by U.S. Geological Survey

MAJOR BASIN Ohio River

MINOR BASIN Ohio River-Main Stem & Minor Trib

STATION LOCATION Ohio River at
East Liverpool, Ohio

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.080 | 8.000 | 26.000 | 13.900 | 35.500 | 112.000 | 92.700 | 24.400 | 9.220 | 5.800 | 4.460 | 3.370 |
| 2 | 5.000 | 9.990 | 20.500 | 13.400 | 31.000 | 90.400 | 85.800 | 30.200 | 10.600 | 4.320 | 4.390 | 13.100 |
| 3 | 5.480 | 10.600 | 16.600 | 13.400 | 28.500 | 90.400 | 83.500 | 34.600 | 8.900 | 8.000 | 4.320 | 6.040 |
| 4 | 6.920 | 10.800 | 13.700 | 14.200 | 28.500 | 83.500 | 74.600 | 38.200 | 7.460 | 7.030 | 4.250 | 6.040 |
| 5 | 6.920 | 8.900 | 14.200 | 15.900 | 32.800 | 68.000 | 65.800 | 33.700 | 10.600 | 6.650 | 4.390 | 7.100 |
| 6 | 8.000 | 7.910 | 15.000 | 20.500 | 42.000 | 53.100 | 57.300 | 27.600 | 15.600 | 6.040 | 4.250 | 6.830 |
| 7 | 7.730 | 8.900 | 16.600 | 48.700 | 42.000 | 45.000 | 72.400 | 24.400 | 17.500 | 6.040 | 4.180 | 6.380 |
| 8 | 6.040 | 10.500 | 19.000 | 95.000 | 39.200 | 41.100 | 102.000 | 23.600 | 13.200 | 5.640 | 5.460 | 5.560 |
| 9 | 5.400 | 10.400 | 17.500 | 76.800 | 34.600 | 35.500 | 102.000 | 23.600 | 10.800 | 4.460 | 6.420 | 4.180 |
| 10 | 5.240 | 10.200 | 14.600 | 68.000 | 30.200 | 31.000 | 88.100 | 23.600 | 7.730 | 4.530 | 4.760 | 3.690 |
| 11 | 5.560 | 9.110 | 13.900 | 48.000 | 23.600 | 30.200 | 88.100 | 21.200 | 6.470 | 4.530 | 4.840 | 4.390 |
| 12 | 5.400 | 8.400 | 20.600 | 37.300 | 19.800 | 57.600 | 83.500 | 20.500 | 7.340 | 4.460 | 4.530 | 4.920 |
| 13 | 5.160 | 7.640 | 29.400 | 28.500 | 20.500 | 88.100 | 95.000 | 17.000 | 17.600 | 4.460 | 4.600 | 4.600 |
| 14 | 7.010 | 9.000 | 34.600 | 21.200 | 22.000 | 88.100 | 102.000 | 15.400 | 26.000 | 4.460 | 4.530 | 4.390 |
| 15 | 7.100 | 10.200 | 39.200 | 19.000 | 22.000 | 88.100 | 97.300 | 15.800 | 30.200 | 4.760 | 4.920 | 4.110 |
| 16 | 8.000 | 13.200 | 35.500 | 27.800 | 20.500 | 74.600 | 97.300 | 14.800 | 28.500 | 4.390 | 4.530 | 3.760 |
| 17 | 7.550 | 19.100 | 31.900 | 31.900 | 20.500 | 63.600 | 90.400 | 14.800 | 22.800 | 5.640 | 4.530 | 3.550 |
| 18 | 6.920 | 26.000 | 38.200 | 30.200 | 19.800 | 48.000 | 79.000 | 13.500 | 18.300 | 7.190 | 4.250 | 3.410 |
| 19 | 6.830 | 24.400 | 57.300 | 28.500 | 18.300 | 39.200 | 70.200 | 14.100 | 15.900 | 6.120 | 4.180 | 3.480 |
| 20 | 6.200 | 22.000 | 57.300 | 26.000 | 25.200 | 42.000 | 57.300 | 11.800 | 14.200 | 5.160 | 3.690 | 3.620 |
| 21 | 6.830 | 19.800 | 57.300 | 20.500 | 27.600 | 57.300 | 53.100 | 9.000 | 14.800 | 5.240 | 4.040 | 3.620 |
| 22 | 9.110 | 17.000 | 57.300 | 24.500 | 26.800 | 101.000 | 48.000 | 9.660 | 13.100 | 5.000 | 4.110 | 3.480 |
| 23 | 6.740 | 17.300 | 50.000 | 48.800 | 32.000 | 130.000 | 42.000 | 10.200 | 9.880 | 4.600 | 4.390 | 3.340 |
| 24 | 6.650 | 36.600 | 43.000 | 59.400 | 85.200 | 120.000 | 44.000 | 10.500 | 9.330 | 4.920 | 4.320 | 3.270 |
| 25 | 7.640 | 76.800 | 36.400 | 61.500 | 74.600 | 114.000 | 47.000 | 11.000 | 8.700 | 5.960 | 3.760 | 3.200 |
| 26 | 7.730 | 72.400 | 30.200 | 61.500 | 65.800 | 104.000 | 42.000 | 12.500 | 7.910 | 6.040 | 3.480 | 3.620 |
| 27 | 7.010 | 57.300 | 25.200 | 65.800 | 79.000 | 90.400 | 34.600 | 12.600 | 7.730 | 5.560 | 3.760 | 4.130 |
| 28 | 6.830 | 45.000 | 25.200 | 65.800 | 104.000 | 72.400 | 29.400 | 10.400 | 6.560 | 5.480 | 3.020 | 10.700 |
| 29 | 6.470 | 35.500 | 24.400 | 63.600 |  | 59.400 | 24.400 | 12.000 | 6.470 | 5.320 | 2.900 | 10.200 |
| 30 | 6.650 | 30.200 | 22.000 | 61.500 |  | 53.100 | 20.500 | 12.900 | 6.120 | 4.600 | 3.080 | 10.100 |
| 31 | 7.280 |  | 18.300 | 48.000 |  | 63.600 |  | 9.220 |  | 4.250 | 3.020 |  |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Arkansas-Louisiana State Line
Operated by U.S. Geological Survey

STATE Louisiana

MAJOR BASIN Southwest-Lower Mississippi River

MINOR BASIN Ouachita River

STATION LOCATION Ouachita River at
Bastrop, Louisiana

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.170 | 2.850 | | | | | | | 1.680 | 1.540 | 2.160 | 2.240 |
| 2 | 4.420 | 2.750 | | | | | | | 2.860 | 1.400 | 1.950 | 2.380 |
| 3 | 5.140 | 3.210 | | | | | | | 5.780 | 2.000 | 1.770 | 5.000 |
| 4 | 5.710 | 3.870 | | | | | | | 6.000 | 2.100 | 1.410 | 6.500 |
| 5 | 6.440 | 4.300 | | | | | AVAILABLE | | 6.020 | 1.900 | 1.410 | 7.310 |
| 6 | 7.300 | 4.940 | | | | | | | 6.100 | 1.900 | 1.360 | 7.140 |
| 7 | 7.710 | 4.990 | 12.500 | | | | | | 6.100 | 1.600 | 1.200 | 6.730 |
| 8 | 7.630 | 4.070 | 10.100 | | | | | | 7.090 | 1.500 | 1.000 | 6.000 |
| 9 | 7.310 | 3.610 | 8.750 | | | | | | 7.290 | 1.400 | 1.000 | 5.000 |
| 10 | 5.780 | 3.610 | 10.200 | | | | | | 7.620 | 1.300 | 1.000 | 4.000 |
| 11 | 4.410 | 3.600 | | | | | | | 9.450 | 1.500 | 1.000 | 5.000 |
| 12 | 2.740 | 4.320 | | | | | | | 10.300 | 1.500 | 1.500 | 5.770 |
| 13 | 2.610 | 5.250 | | | | | | | 10.200 | 1.500 | 1.930 | 7.620 |
| 14 | 2.830 | 5.540 | | | | | | | 10.400 | 1.400 | 2.360 | 8.710 |
| 15 | 3.170 | 5.640 | | | NOT | | | | 10.400 | 1.200 | 2.200 | 8.790 |
| 16 | 3.360 | 5.800 | | | | | | | 10.000 | 1.100 | 1.800 | 8.370 |
| 17 | 3.400 | 6.000 | | | | | | | 8.500 | 1.100 | 1.500 | 7.720 |
| 18 | 3.110 | 5.800 | | | | | | | 7.840 | 1.100 | 1.600 | 6.760 |
| 19 | 2.810 | 5.670 | | | | | | | 5.490 | 1.000 | 1.700 | 6.190 |
| 20 | 2.840 | 5.560 | | | | | | 4.630 | 4.280 | 1.000 | 1.850 | 4.410 |
| 21 | 2.870 | 5.330 | | | | | | 4.840 | 3.870 | 1.000 | 1.940 | 3.880 |
| 22 | 2.940 | 5.470 | | | | | | 3.000 | 2.630 | 1.000 | 1.990 | 3.990 |
| 23 | 3.050 | 6.360 | | | | | | 1.500 | 1.550 | 1.000 | 1.870 | 4.270 |
| 24 | 3.070 | 8.810 | | | | | | 1.400 | 1.430 | 1.000 | 1.970 | 4.310 |
| 25 | 2.760 | 14.800 | DATA | | | | | 1.300 | 1.580 | 1.000 | 2.550 | 3.970 |
| 26 | 2.570 | 15.700 | | | | | | 1.200 | 1.580 | 2.000 | 2.720 | 3.560 |
| 27 | 2.370 | 17.000 | | | | | | 1.200 | 2.040 | 2.000 | 2.730 | 3.020 |
| 28 | 2.380 | 18.200 | | | | | | 1.100 | 2.050 | 2.000 | 2.670 | 2.960 |
| 29 | 2.550 | | | | | | | 1.100 | 2.030 | 2.000 | 2.400 | 2.960 |
| 30 | 2.760 | | | | | | | 1.100 | 1.710 | 2.000 | 2.160 | 2.990 |
| 31 | 2.950 | | | | | | | 1.600 | | 2.000 | 2.060 | |

No discharge measurements were made for part of the year because of high flows that could not be measured accurately. No records are available for these periods.

## RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** OUACHITA RIVER

**STATION LOCATION** OUACHITA RIVER AT
BASTROP, LOUISIANA 85

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 26 | 0 | 1 | 0 | 2 | 0 | 2 | 8 | 8 | 7 | 9 | 15 | 12 | | | | | | |
| 10 | 9 | 61 | 10 | 24 | 3 | 2 | 1 | 1 | 4 | 2 | 14 | 6 | 14 | 5 | 28 | 8 | | | | | | |
| 10 | 16 | 61 | 10 | 31 | 0 | 1 | 0 | 1 | 0 | 1 | 9 | 8 | 18 | 10 | 27 | 13 | | | | | | |
| 10 | 24 | 61 | 11 | 2 | 1 | 1 | 3 | 2 | 4 | 2 | 2 | 9 | 6 | 11 | 8 | 14 | | | | | | |
| 10 | 31 | 61 | 11 | 13 | 0 | 1 | 0 | 3 | 0 | 3 | 22 | 9 | 15 | 11 | 37 | 14 | | | | | | |
| 11 | 6 | 61 | 11 | 16 | 0 | 1 | 1 | 2 | 1 | 2 | 18 | 8 | 24 | 11 | 42 | 14 | | | | | | |
| 11 | 14 | 61 | 11 | 29 | 0 | 1 | 2 | 2 | 2 | 2 | 40 | 12 | 65 | 15 | 105 | 19 | | | | | | |
| 11 | 20 | 61 | 12 | 1 | 3 | 5 | 2 | 3 | 5 | 6 | 9 | 15 | 36 | 12 | 45 | 19 | | | | | | |
| 11 | 27 | 61 | 12 | 7 | 1 | 1 | 0 | 1 | 1 | 1 | 82 | 7 | 70 | 6 | 152 | 9 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 34 | 7 | 49 | 7 | 83 | 10 | | | | | | |
| 12 | 11 | 61 | 12 | 21 | 1 | 1 | 0 | 1 | 1 | 1 | 61 | 6 | 84 | 7 | 145 | 9 | | | | | | |
| 12 | 27 | 61 | 1 | 5 | 1 | 1 | 1 | 1 | 2 | 1 | 46 | 6 | 73 | 6 | 119 | 8 | | | | | | |
| 1 | 3 | 62 | 1 | 17 | 2 | 2 | 0 | 1 | 2 | 2 | 49 | 7 | 47 | 5 | 96 | 9 | | | | | | |
| 1 | 9 | 62 | 1 | 22 | 1 | 1 | 1 | 1 | 2 | 1 | 61 | 6 | 74 | 6 | 135 | 8 | | | | | | |
| 1 | 18 | 62 | 1 | 26 | 2 | 1 | 1 | 1 | 3 | 1 | 78 | 7 | 79 | 6 | 157 | 9 | | | | | | |
| 1 | 22 | 62 | 2 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 67 | 6 | 76 | 6 | 143 | 8 | | | | | | |
| 1 | 29 | 62 | 2 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 86 | 7 | 99 | 8 | 185 | 11 | | | | | | |
| 2 | 5 | 62 | 2 | 15 | 1 | 1 | 0 | 1 | 1 | 1 | 86 | 6 | 98 | 6 | 184 | 8 | | | | | | |
| 2 | 12 | 62 | 2 | 23 | 0 | 1 | 0 | 1 | 0 | 1 | 70 | 6 | 95 | 7 | 165 | 9 | | | | | | |
| 2 | 26 | 62 | 3 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 52 | 5 | 62 | 5 | 114 | 7 | | | | | | |
| 3 | 5 | 62 | 3 | 15 | 1 | 1 | 0 | 1 | 1 | 1 | 43 | 5 | 58 | 6 | 101 | 7 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | 1 | 1 | 0 | 1 | 1 | 1 | 48 | 5 | 51 | 6 | 99 | 7 | | | | | | |
| 3 | 19 | 62 | 4 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 48 | 6 | 59 | 5 | 107 | 7 | | | | | | |
| 3 | 26 | 62 | 4 | 4 | 0 | 1 | 0 | 1 | 0 | 1 | 48 | 5 | 45 | 5 | 93 | 7 | | | | | | |
| 4 | 2 | 62 | 4 | 16 | 0 | 0 | 1 | 1 | 1 | 1 | 34 | 5 | 52 | 6 | 86 | 7 | | | | | | |
| 4 | 9 | 62 | 4 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 5 | 48 | 5 | 84 | 7 | | | | | | |
| 4 | 16 | 62 | 5 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 50 | 5 | 55 | 6 | 105 | 7 | | | | | | |
| 4 | 23 | 62 | 5 | 28 | 1 | 1 | 0 | 1 | 1 | 1 | 62 | 8 | 32 | 8 | 94 | 11 | | | | | | |
| 4 | 30 | 62 | 6 | 4 | 0 | 0 | 0 | 1 | 0 | 1 | 26 | 6 | 47 | 7 | 73 | 9 | | | | | | |
| 5 | 7 | 62 | 6 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 48 | 6 | 49 | 8 | 97 | 10 | | | | | | |
| 5 | 14 | 62 | 6 | 22 | 0 | 1 | 0 | 0 | 0 | 1 | 13 | 5 | 44 | 7 | 57 | 9 | | | | | | |
| 5 | 21 | 62 | 6 | 25 | 1 | 1 | 0 | 1 | 1 | 1 | 24 | 6 | 36 | 7 | 60 | 9 | | | | | | |
| 5 | 28 | 62 | 6 | 29 | 1 | 1 | 0 | 1 | 1 | 1 | 16 | 4 | 33 | 5 | 49 | 6 | | | | | | |
| 6 | 4 | 62 | 7 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 35 | 6 | 37 | 8 | 72 | 10 | | | | | | |
| 6 | 10 | 62 | 7 | 9 | 2 | 2 | 2 | 3 | 4 | 4 | 70 | 13 | 59 | 17 | 129 | 21 | | | | | | |
| 6 | 18 | 62 | 8 | 10 | 6 | - | 0 | - | 6 | - | 42 | 24 | 33 | 8 | 75 | 25 | | | | | | |
| 6 | 25 | 62 | 7 | 23 | 0 | 1 | 0 | 1 | 0 | 1 | 25 | 6 | 27 | 8 | 52 | 10 | | | | | | |
| 7 | 2 | 62 | 8 | 3 | 1 | 1 | 0 | 1 | 1 | 1 | 17 | 13 | 45 | 17 | 62 | 21 | | | | | | |
| 7 | 16 | 62 | 8 | 14 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 9 | 26 | 14 | 33 | 17 | | | | | | |
| 7 | 23 | 62 | 8 | 20 | 1 | 2 | 1 | 4 | 2 | 4 | 16 | 11 | 36 | 13 | 52 | 17 | | | | | | |
| 7 | 30 | 62 | 8 | 17 | 1 | 1 | 1 | 2 | 2 | 2 | 21 | 11 | 37 | 15 | 58 | 19 | | | | | | |

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** OUACHITA RIVER

**STATION LOCATION** OUACHITA RIVER AT
BASTROP, LOUISIANA

85

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 8 | 7 | 62 | 8 | 23 | 1 | 1 | 1 | 2 | 2 | 2 | 7 | 10 | 10 | 18 | 17 | 18 | | | | | | |
| 8 | 20 | 62 | 9 | 5 | 0 | 0 | 1 | 2 | 1 | 2 | 0 | 5 | 14 | 10 | 14 | 11 | | | | | | |
| 9 | 5 | 62 | 9 | 21 | 0 | 1 | 1 | 2 | 1 | 2 | 7 | 9 | 24 | 13 | 31 | 16 | | | | | | |
| 9 | 10 | 62 | 9 | 27 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 12 | 22 | 16 | 26 | 20 | | | | | | |
| 9 | 17 | 62 | 10 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 5 | 14 | 6 | 17 | 7 | | | | | | |
| 9 | 24 | 62 | 10 | 17 | 0 | 1 | 0 | 1 | 0 | 1 | 15 | 6 | 15 | 7 | 30 | 9 | | | | | | |

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 500 | 0 | 0 | 60 | 0 | 80 | 0 | 230 | 100 | 60 | 20 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 400 | 0 | 0 | 60 | 0 | 150 | 20 | 120 | 80 | 20 | 20 | | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 200 | 0 | 20 | 0 | 0 | 80 | 0 | 40 | 100 | 40 | 20 | | | | | | | | | | | | | | | | | | | | |
| 11 | 22 | 61 | 200 | 0 | 0 | 50 | 0 | 50 | 0 | 140 | 0 | 50 | 70 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 200 | 0 | 0 | 60 | 0 | 0 | 20 | 20 | 60 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 1 | 3 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 100 | 0 | 0 | 0 | 0 | 70 | 0 | 20 | 20 | 0 | 50 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 50 | 110 | 0 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 600 | 60 | 0 | 80 | 0 | 250 | 150 | 60 | 40 | 20 | 0 | 51 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 3500 | 40 | 0 | 40 | 0 | 80 | 2830 | 210 | 260 | 0 | 20 | 65 | 4 | 62 | 1 | 63 | 1 | 97 | 1 | | | | | | | | | | | | |
| 3 | 19 | 62 | 200 | 0 | 0 | 40 | 0 | 160 | 20 | 0 | 0 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 1300 | 0 | 0 | 100 | 0 | 730 | 410 | 20 | 20 | 0 | 0 | 60 | 2 | 57 | 1 | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 3700 | 0 | 0 | 180 | 0 | 470 | 2670 | 200 | 160 | 270 | 90 | 65 | 5 | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 12800 | 11160 | 0 | 170 | 0 | 350 | 290 | 270 | 600 | 0 | 40 | 4 | 7 | 93 | 1 | 57 | 1 | 60 | 1 | 69 | 1 | 77 | 1 | | | | | | | | |
| 5 | 21 | 62 | 1800 | 40 | 80 | 130 | 0 | 120 | 100 | 700 | 580 | 40 | 20 | 68 | 2 | 69 | 1 | 93 | 1 | 92 | 1 | | | | | | | | | | | | |
| 6 | 4 | 62 | 1600 | 0 | 0 | 210 | 0 | 330 | 250 | 230 | 560 | 20 | 20 | 93 | 2 | 51 | 1 | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 3800 | 2900 | 0 | 120 | 0 | 330 | 40 | 170 | 250 | 0 | 80 | 51 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 6400 | 210 | 80 | 630 | 0 | 4070 | 80 | 550 | 760 | 250 | 40 | 51 | 5 | 69 | 1 | 68 | 1 | 71 | 1 | 93 | 1 | | | | | | | | | | |
| 7 | 16 | 62 | 2100 | 120 | 0 | 700 | 0 | 830 | 0 | 210 | 210 | 120 | 120 | 51 | 3 | 25 | 2 | | | | | | | | | | | | | | | | |
| 8 | 7 | 62 | 1100 | 20 | 0 | 150 | 0 | 210 | 0 | 410 | 330 | 40 | 0 | 69 | 1 | 68 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 1000 | 40 | 0 | 40 | 0 | 0 | 20 | 550 | 380 | 40 | 130 | 88 | 2 | 68 | 1 | 69 | 1 | | | | | | | | | | | | | | |
| 9 | 3 | 62 | 1500 | 80 | 0 | 290 | 0 | 330 | 100 | 330 | 330 | 40 | 120 | 69 | 1 | 51 | 1 | 88 | 1 | | | | | | | | | | | | | | |
| 9 | 16 | 62 | 600 | 40 | 0 | 40 | 0 | 0 | 210 | 80 | 210 | 80 | 40 | 63 | 1 | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| | | | | | | | | | | | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 57 | 41 | 56 | 16 | 23 | 6 | 27 | 4 | 33 | 460 | 0 | 20 | 17 | 2 | | | | | | | | | 1 | | | | | | | 2 | 0 |
| 10 | 16 | 61 | 57 | 19 | 56 | 10 | 82 | 7 | 10 | 6 | 58 | 0 | 0 | 63 | 21 | 3 | 11 | 2 | 17 | 1 | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 71 | 19 | 92 | 13 | 10 | 10 | 57 | 8 | 50 | 4220 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 22 | 61 | 10 | 21 | 56 | 11 | 57 | 8 | 70 | 7 | 53 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 56 | 12 | 10 | 11 | 43 | 7 | 57 | 7 | 63 | 0 | 0 | 6 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 3 | 62 | | | | | | | | | | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | | | | | | | | | | 20 | 0 | 12 | 11 | 1 | 17 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | | | | | | | | | | 0 | 0 | 7 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 92 | 17 | 51 | 13 | 43 | 11 | 9 | 9 | 50 | 20 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 43 | 31 | 95 | 16 | 94 | 10 | 92 | 9 | 34 | 0 | 0 | 7 | 17 | 1 | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 43 | 28 | 56 | 15 | 95 | 10 | 9 | 7 | 40 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 95 | 47 | 56 | 21 | 43 | 15 | 57 | 5 | 12 | 20 | 10 | 26 | 46 | 2 | | | | | | | | | 5 | 76 | 1 | | | | | 0 | 0 |
| 4 | 16 | 62 | 95 | 35 | 56 | 26 | 43 | 13 | 57 | 8 | 18 | 20 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 95 | 62 | 56 | 28 | 9 | 3 | 58 | 2 | 5 | 0 | 0 | 48 | 11 | 2 | 21 | 2 | 17 | 1 | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 56 | 27 | 95 | 22 | 92 | 17 | 10 | 8 | 26 | 20 | 0 | 149 | 11 | 4 | 17 | 4 | 22 | 1 | | | | | 17 | 51 | 2 | 76 | 1 | 50 | 1 | 0 | 5 |
| 6 | 4 | 62 | 95 | 59 | 58 | 11 | 56 | 7 | 57 | 4 | 19 | 0 | 0 | 29 | 17 | 2 | 11 | 1 | | | | | | | 8 | 51 | 1 | | | | | 0 | 0 |
| 6 | 18 | 62 | 95 | 44 | 58 | 9 | 43 | 8 | 57 | 7 | 32 | 11840 | 0 | 8 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 97 | 18 | 95 | 14 | 57 | 9 | 58 | 8 | 51 | 0 | 0 | 1590 | 17 | 8 | 22 | 6 | 21 | 3 | 7 | 3 | 2 | 3 | 21 | 50 | 3 | | | | | 0 | 2 |
| 7 | 16 | 62 | 58 | 78 | 56 | 5 | 57 | 3 | 95 | 2 | 12 | 0 | 0 | 2260 | 17 | 9 | 11 | 4 | 2 | 3 | 22 | 3 | 21 | 2 | 11 | 50 | 1 | | | | | 0 | 1 |
| 8 | 7 | 62 | 58 | 58 | 56 | 12 | 92 | 9 | 26 | 6 | 15 | 0 | 10 | 368 | 17 | 5 | 11 | 5 | 2 | 4 | 22 | 3 | | | 7 | 50 | 1 | 76 | 1 | | | 0 | 0 |
| 8 | 20 | 62 | 71 | 49 | 26 | 17 | 56 | 10 | 58 | 5 | 19 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 3 | 62 | 56 | 30 | 57 | 26 | 71 | 13 | 58 | 12 | 19 | 0 | 0 | 75 | 17 | 4 | 21 | 2 | 16 | 1 | 22 | 1 | 11 | 1 | 3 | 50 | 1 | | | | | 0 | 0 |
| 9 | 16 | 62 | 95 | 36 | 57 | 13 | 56 | 11 | 58 | 6 | 34 | 0 | 0 | 106 | 17 | 4 | 11 | 3 | 18 | 2 | 2 | 2 | 22 | 2 | 12 | 50 | 2 | 76 | 1 | | | 2 | 0 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 27.5 | 7.6 | 6.7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 10 | 9 | 61 | 20.0 | 7.8 | 6.7 | - | - | - | - | - | - | - | - | 35 | - | - | .2 | 215 | - |
| 10 | 16 | 61 | - | - | 6.7 | - | - | - | - | 0 | 141 | 20 | 84 | 30 | 0 | 30 | .1 | 309 | - |
| 10 | 24 | 61 | 21.0 | 9.1 | 6.9 | - | - | - | - | - | 145 | 25 | 84 | - | 10 | 10 | .0 | 314 | - |
| 10 | 31 | 61 | 20.0 | 8.8 | 6.7 | - | - | - | - | - | 156 | 25 | 76 | - | 9 | 12 | - | - | - |
| 11 | 6 | 61 | 17.0 | 7.6 | 6.7 | - | - | - | - | - | 156 | 16 | 76 | 15 | 10 | 10 | - | - | - |
| 11 | 14 | 61 | 17.0 | 7.4 | 6.7 | - | - | - | - | - | 179 | 9 | 80 | 25 | 95 | 12 | .2 | - | - |
| 11 | 20 | 61 | 15.0 | 8.4 | 6.7 | - | - | - | - | - | 108 | 25 | 92 | 20 | - | 9 | .3 | - | - |
| 11 | 27 | 61 | 14.0 | 7.4 | 6.7 | - | - | - | - | - | 41 | 20 | 24 | - | - | 6 | .1 | 104 | - |
| 12 | 4 | 61 | 13.0 | 6.9 | 6.5 | - | - | - | - | - | 32 | 20 | 40 | - | - | 9 | .1 | - | - |
| 12 | 11 | 61 | 12.0 | 8.2 | 6.7 | - | - | - | - | - | 97 | 2 | 51 | - | - | 13 | .2 | - | - |
| 12 | 27 | 61 | 8.0 | 7.8 | 6.5 | - | - | - | - | .3 | 40 | 20 | 72 | - | 600 | 24 | .0 | - | - |
| 1 | 3 | 62 | 8.0 | 8.2 | 6.5 | - | - | - | - | .3 | 30 | 20 | 52 | - | 120 | 15 | .1 | - | - |
| 1 | 9 | 62 | 6.0 | 8.4 | 6.7 | - | - | - | - | .2 | 22 | 20 | 60 | - | - | 22 | .2 | - | - |
| 1 | 15 | 62 | 6.0 | 8.8 | 6.7 | - | - | - | - | .3 | 36 | 20 | 51 | - | - | - | - | - | - |
| 1 | 22 | 62 | 10.0 | 9.2 | 6.5 | - | - | - | - | .3 | 42 | 20 | 64 | - | - | 23 | 1.0 | - | - |
| 1 | 29 | 62 | 7.0 | 8.8 | 6.5 | - | - | - | - | .2 | 44 | 30 | - | - | - | 27 | .2 | - | - |
| 2 | 5 | 62 | 11.0 | 8.6 | 6.5 | - | - | - | - | .3 | 33 | 25 | - | - | - | 13 | .2 | - | - |
| 2 | 12 | 62 | 12.0 | 7.2 | 6.7 | - | - | - | - | .3 | 30 | 10 | - | - | - | 27 | .3 | - | - |
| 2 | 19 | 62 | 13.0 | 6.8 | 6.5 | - | - | - | - | .1 | 20 | 10 | - | - | - | 21 | .1 | - | - |
| 2 | 27 | 62 | 16.0 | 6.8 | 6.4 | - | - | - | - | .3 | 25 | 5 | - | - | - | 18 | - | - | - |
| 3 | 5 | 62 | 12.0 | 6.8 | 6.5 | - | - | - | - | .3 | 43 | 26 | - | - | - | 12 | .2 | - | - |
| 3 | 12 | 62 | 11.0 | 7.4 | 6.6 | - | - | - | - | .2 | 20 | 22 | - | - | - | 22 | .3 | - | - |
| 3 | 19 | 62 | 11.0 | 7.8 | 6.7 | - | - | - | - | .3 | 14 | 20 | - | - | - | 20 | .1 | - | - |
| 3 | 26 | 62 | 15.0 | 7.4 | 6.7 | - | - | - | - | .1 | 18 | 24 | - | - | - | 17 | .1 | - | - |
| 4 | 2 | 62 | 15.0 | 6.5 | 6.5 | - | - | - | - | .2 | 28 | 44 | 32 | 35 | - | 10 | .0 | - | - |
| 4 | 9 | 62 | 16.0 | 6.8 | 6.7 | - | - | - | - | .2 | 22 | 22 | 40 | 30 | - | 14 | .1 | - | - |
| 4 | 16 | 62 | 17.0 | 6.4 | 6.5 | - | - | - | - | .2 | 40 | 105 | 34 | - | - | 10 | 2.5 | - | - |
| 4 | 23 | 62 | 20.0 | 5.8 | 6.5 | - | - | - | - | .2 | 45 | - | 34 | - | - | 27 | - | - | - |
| 4 | 30 | 62 | 23.5 | 4.4 | 6.4 | - | - | - | - | .4 | 55 | 20 | 44 | 15 | - | 18 | 2.7 | - | - |
| 5 | 14 | 62 | 24.5 | 2.6 | 6.4 | - | - | - | - | - | 54 | 16 | 56 | 50 | 25 | - | - | - | - |
| 6 | 10 | 62 | 27.5 | 4.2 | 6.9 | - | - | - | - | - | 140 | 20 | 68 | 20 | *25 | 9 | .0 | 349 | - |
| 6 | 18 | 62 | 28.0 | 5.4 | 7.5 | - | - | - | - | - | 71 | 22 | 60 | 20 | *25 | 33 | .0 | 192 | - |
| 6 | 25 | 62 | 30.0 | 4.4 | 6.6 | - | - | - | - | - | 62 | 28 | 52 | 30 | 95 | 22 | .0 | 190 | - |
| 7 | 2 | 62 | 31.5 | 5.8 | 6.7 | - | - | - | - | - | 116 | 28 | 88 | 30 | 40 | 18 | .0 | - | - |
| 7 | 12 | 62 | - | - | - | - | - | - | - | - | 188 | 16 | 88 | 15 | 25 | 16 | .0 | 428 | - |
| 7 | 16 | 62 | 35.5 | 3.4 | 6.7 | - | - | - | - | .2 | 181 | 24 | 88 | 10 | 25 | 17 | .0 | 410 | - |
| 7 | 23 | 62 | 32.0 | 4.8 | 6.7 | - | - | - | - | - | 355 | 24 | 140 | 10 | 25 | 17 | .1 | 694 | - |
| 7 | 30 | 62 | 30.5 | 4.6 | 7.8 | - | - | - | - | - | 145 | 108 | 80 | 25 | 600 | 17 | .0 | 417 | - |

| DATE OF SAMPLI. | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 8 | 7 | 62 | 32.0 | 6.0 | 7.7 | - | - | - | - | - | 232 | 30 | 96 | - | - | 11 | .0 | 484 | - |
| 8 | 20 | 62 | 31.0 | 5.2 | 6.6 | - | - | - | - | - | 234 | 16 | 96 | 20 | - | 13 | .0 | 531 | - |
| 9 | 4 | 62 | 30.5 | 6.4 | 6.7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 10 | 62 | 27.0 | 6.2 | 6.7 | - | - | - | - | - | 138 | 16 | 68 | 15 | 25 | 8 | .0 | 320 | - |
| 9 | 17 | 62 | 27.0 | 6.8 | 6.7 | - | - | - | - | - | 146 | 28 | 84 | 10 | 25 | 12 | .0 | 353 | - |
| 9 | 24 | 62 | - | - | - | - | - | - | - | - | 58 | 28 | 44 | 20 | *25 | 15 | .0 | 155 | - |

# PLANKTON POPULATION

**MAJOR BASIN** PACIFIC NORTHWEST

**MINOR BASIN** CLARK FORK-PEND OREILLE RIVER

**STATION LOCATION** PEND OREILLE RIVER AT

ALBENI FALLS DAM, IDAHO 113

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 5 | 15 | 62 | 2800 | 0 | 0 | 20 | 0 | 370 | 100 | 1260 | 990 | 120 | 100 | 71 | 3 | 92 | 2 | 68 | 2 | 57 | 2 | | | | | | | | | | | | |
| 5 | 28 | 62 | 1100 | 0 | 0 | 20 | 0 | 0 | 0 | 170 | 890 | 270 | 630 | 93 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 6 | 13 | 62 | 1300 | 0 | 0 | 0 | 0 | 80 | 20 | 150 | 1080 | 20 | 60 | 93 | 1 | | | | | | | | | | | | | | | | | | |
| 6 | 27 | 62 | 1700 | 0 | 0 | 40 | 0 | 20 | 130 | 490 | 990 | 400 | 360 | 93 | 2 | 73 | 1 | | | | | | | | | | | | | | | | |
| 7 | 10 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 300 | 130 | 40 | 210 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 31 | 62 | 200 | 0 | 0 | 40 | 0 | 0 | 0 | 80 | 120 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 8 | 13 | 62 | 200 | 0 | 0 | 40 | 0 | 0 | 80 | 0 | 40 | 20 | 20 | | | | | | | | | | | | | | | | | | | | |
| 8 | 31 | 62 | 1000 | 0 | 130 | 0 | 0 | 0 | 0 | 510 | 340 | 210 | 130 | 68 | 2 | 84 | 1 | | | | | | | | | | | | | | | | |
| 9 | 11 | 62 | 6800 | 0 | 190 | 0 | 0 | 40 | 0 | 1700 | 4890 | 80 | 1160 | 88 | 3 | 68 | 3 | 97 | 3 | 81 | 3 | 92 | 3 | 71 | 2 | 87 | 2 | 73 | 1 | 79 | 1 | 82 | 1 |
| 9 | 26 | 62 | 00 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 20 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |

IDAHO

# PLANKTON POPULATION

**MAJOR BASIN** PACIFIC NORTHWEST

**MINOR BASIN** CLARK FORK-PEND OREILLE RIVER

**STATION LOCATION** PEND OREILLE RIVER AT
ALBENI FALLS DAM, IDAHO 113

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | | |
| | | | | | | | | | | | | | | | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | NUMBER PER LITER | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | NUMBER PER LITER | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| 5 | 15 | 62 | 95 | 35 | 92 | 17 | 82 | 10 | 9 | 7 | 31 | 0 | 0 | 6 | 11 | 1 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 5 | 28 | 62 | 95 | 81 | 9 | 6 | 92 | 3 | 46 | 3 | 7 | 150 | 0 | 11 | 11 | 1 | | | | | | | | | 5 | | | | | | | 0 | 0 |
| 6 | 13 | 62 | 95 | 64 | 9 | 7 | 46 | 4 | 48 | 4 | 21 | 0 | 0 | 27 | 21 | 2 | 10 | 1 | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 27 | 62 | 95 | 85 | 9 | 4 | 46 | 3 | 47 | 2 | 6 | 0 | 0 | 4 | | | | | | | | | | | 3 | 51 | 1 | | | | | 0 | 0 |
| 7 | 10 | 62 | 95 | 69 | 47 | 8 | 46 | 4 | 30 | 3 | 16 | 0 | 10 | 17 | 11 | 1 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 7 | 31 | 62 | 47 | 30 | 95 | 21 | 9 | 8 | 30 | 5 | 36 | 0 | 0 | 188 | 17 | 5 | 11 | 2 | 10 | 2 | | | | | 15 | 50 | 2 | 51 | 1 | | | 0 | 0 |
| 8 | 13 | 62 | 56 | 22 | 47 | 15 | 95 | 12 | 58 | 7 | 44 | 0 | 0 | 33 | 17 | 3 | 22 | 1 | | | | | | | 14 | 76 | 3 | | | | | 0 | 20 |
| 8 | 31 | 62 | 47 | 40 | 56 | 14 | 25 | 13 | 58 | 12 | 21 | 0 | 0 | 16 | 17 | 2 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 11 | 62 | 58 | 20 | 95 | 11 | 41 | 7 | 47 | 6 | 56 | 0 | 0 | 45 | 17 | 3 | | | | | | | | | 27 | 50 | 3 | 76 | 2 | 77 | 1 | 0 | 0 |
| 9 | 26 | 62 | 58 | 32 | 47 | 13 | 56 | 5 | 25 | 4 | 46 | 0 | 0 | 124 | 17 | 5 | 5 | 1 | 11 | 1 | | | | | 6 | 50 | 2 | | | | | 0 | 0 |

**MAJOR BASIN** PACIFIC NORTHWEST

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** CLARK FORK-PEND OREILLE RIVER

**STATION LOCATION** PEND OREILLE RIVER AT
ALBENI FALLS DAM, IDAHO 113

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 5 | 15 | 62 | 6 | 25 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 3 | 12 | 4 | 14 | 5 | | | | | | |
| 5 | 25 | 62 | 6 | 27 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 6 | 3 | 6 | 5 | 8 | | | | | | |
| 6 | 1 | 62 | 7 | 2 | 0 | 0 | 1 | 1 | 1 | 1 | 16 | 6 | 9 | 6 | 25 | 8 | | | | | | |
| 6 | 8 | 62 | 7 | 9 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 6 | 6 | 6 | 7 | 8 | | | | | | |
| 6 | 15 | 62 | 7 | 13 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 3 | 10 | 4 | 14 | 5 | | | | | | |
| 6 | 25 | 62 | 7 | 24 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 6 | 7 | 6 | 11 | 8 | | | | | | |
| 6 | 29 | 62 | 8 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 6 | 8 | 7 | 10 | 9 | | | | | | |
| 7 | 6 | 62 | 10 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 11 | 7 | 13 | 9 | | | | | | |
| 7 | 17 | 62 | 8 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 5 | 3 | 6 | 6 | 7 | | | | | | |
| 7 | 20 | 62 | 8 | 7 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 5 | 11 | 6 | 18 | 7 | | | | | | |
| 7 | 27 | 62 | 9 | 19 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 6 | 2 | 6 | 2 | 8 | | | | | | |
| 8 | 3 | 62 | 8 | 23 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 5 | 14 | 7 | 15 | 8 | | | | | | |
| 8 | 13 | 62 | 8 | 31 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 5 | 6 | 6 | 7 | 7 | | | | | | |
| 8 | 17 | 62 | 9 | 5 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 5 | 5 | 6 | 8 | 7 | | | | | | |
| 8 | 24 | 62 | 9 | 30 | 0 | 0 | 1 | 1 | 1 | 1 | 8 | 6 | 1 | 6 | 9 | 8 | | | | | | |
| 8 | 31 | 62 | 9 | 18 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 6 | 12 | 7 | 13 | 9 | | | | | | |
| 9 | 7 | 62 | 9 | 24 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 6 | 9 | 7 | 11 | 9 | | | | | | |
| 9 | 14 | 62 | 10 | 15 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 5 | 6 | 6 | 7 | 8 | | | | | | |
| 9 | 21 | 62 | 10 | 18 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 5 | 10 | 6 | 12 | 8 | | | | | | |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 8 | 31 | 62 | 9 | 8 | 5000 | 74 | 28 | 46 | 1 | 7 | 12 | 2 | 1 | 9 | 0 | 2 | 1 | 1 | 4 |

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** PACIFIC NORTHWEST

**MINOR BASIN** CLARK FORK-PEND OREILLE RIVER

**STATION LOCATION** PEND OREILLE RIVER AT

ALBENI FALLS DAM, IDAHO 113

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 5 | 25 | 62 | - | - | - | - | - | - | - | - | 3 | - | - | 5 | - | 17 | - | - | - |
| 6 | 15 | 62 | - | - | - | - | - | - | - | - | 4 | 52 | 56 | 5 | 25 | 12 | - | - | - |
| 6 | 25 | 62 | - | - | 7.9 | - | - | - | - | - | 4 | 60 | 88 | 0 | *25 | 11 | .0 | - | - |
| 6 | 29 | 62 | - | - | 8.2 | - | - | - | - | - | 3 | 60 | 76 | 10 | - | - | - | - | - |
| 7 | 6 | 62 | - | - | - | - | - | - | - | - | 3 | 60 | 68 | 5 | 25 | 13 | .0 | - | - |
| 7 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | *25 | 17 | .0 | - | - |
| 7 | 20 | 62 | - | - | - | - | - | - | - | - | 4 | 64 | 80 | 5 | 25 | 13 | - | - | - |
| 8 | 3 | 62 | - | - | 8.2 | - | - | - | - | - | 3 | 68 | 72 | 5 | *25 | 8 | - | - | - |
| 8 | 13 | 62 | - | - | - | - | - | - | - | - | 4 | 72 | 84 | 0 | - | 8 | .0 | 99 | - |
| 8 | 17 | 62 | - | - | - | - | - | - | - | - | 2 | 72 | 76 | 5 | - | 7 | .0 | 57 | - |
| 8 | 24 | 62 | - | - | - | - | - | - | - | - | 1 | 72 | 72 | 5 | - | 13 | .0 | - | - |
| 8 | 31 | 62 | - | - | - | - | - | - | - | - | 4 | 60 | 76 | 0 | - | 9 | .0 | 89 | - |
| 9 | 7 | 62 | - | - | - | - | - | - | - | - | 4 | 76 | 80 | 0 | 25 | 12 | .5 | 105 | - |
| 9 | 14 | 62 | - | - | - | - | - | - | - | - | 3 | 76 | 100 | 5 | *25 | 9 | .0 | 97 | - |
| 9 | 21 | 62 | - | - | - | - | - | - | - | - | 2 | 80 | 76 | 5 | *25 | 7 | .0 | 85 | - |
| 9 | 28 | 62 | - | - | - | - | - | - | - | - | 2 | 72 | 84 | 0 | *25 | 9 | .0 | 105 | - |

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Newport, Washington
Data Supplied by U.S. Geological Survey

MINOR BASIN Clark Fork-Pend Oreille River
STATION LOCATION Pend Oreille River at
Albeni Falls Dam, Idaho

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 15.000 | 13.700 | 16.500 | 15.500 | 24.000 | 23.000 | 15.700 | 48.800 | 77.000 | 35.100 | 14.500 | 5.000 |
| 2 | 15.000 | 12.000 | 8.000 | 15.500 | 24.000 | 23.100 | 13.200 | 48.300 | 77.200 | 35.100 | 13.600 | 5.000 |
| 3 | 16.000 | 11.500 | 7.000 | 15.500 | 24.000 | 23.100 | 13.100 | 48.500 | 77.400 | 32.300 | 14.100 | 5.000 |
| 4 | 23.800 | 10.100 | 9.300 | 16.300 | 24.000 | 23.000 | 17.000 | 48.000 | 77.400 | 29.900 | 14.200 | 6.400 |
| 5 | 26.500 | 10.000 | 11.000 | 15.500 | 24.100 | 24.200 | 20.000 | 48.100 | 77.400 | 28.600 | 14.100 | 6.200 |
| 6 | 21.500 | 11.000 | 15.900 | 16.400 | 24.000 | 23.000 | 22.600 | 47.900 | 77.200 | 28.300 | 14.000 | 5.000 |
| 7 | 16.700 | 17.800 | 16.000 | 16.400 | 24.000 | 23.000 | 24.000 | 48.300 | 76.500 | 29.700 | 14.000 | 7.800 |
| 8 | 16.900 | 18.000 | 16.000 | 16.600 | 24.000 | 23.000 | 24.000 | 48.600 | 75.000 | 30.000 | 14.000 | 8.000 |
| 9 | 21.800 | 18.200 | 16.000 | 19.600 | 20.100 | 23.100 | 26.200 | 48.500 | 74.000 | 30.000 | 13.600 | 8.000 |
| 10 | 19.900 | 21.900 | 17.200 | 21.500 | 20.000 | 22.900 | 29.400 | 48.900 | 72.800 | 28.000 | 12.500 | 8.000 |
| 11 | 22.000 | 22.000 | 20.000 | 19.000 | 20.000 | 22.900 | 29.100 | 50.200 | 66.900 | 28.100 | 11.900 | 8.000 |
| 12 | 20.200 | 21.900 | 18.100 | 16.500 | 20.100 | 18.600 | 28.000 | 51.500 | 55.800 | 27.000 | 11.900 | 7.900 |
| 13 | 10.100 | 23.800 | 12.100 | 15.000 | 20.000 | 16.000 | 29.000 | 52.600 | 51.700 | 23.800 | 11.300 | 8.000 |
| 14 | 7.300 | 26.900 | 12.000 | 14.900 | 20.000 | 16.100 | 30.000 | 53.000 | 47.700 | 20.700 | 10.500 | 8.000 |
| 15 | 16.400 | 27.000 | 14.000 | 17.500 | 20.000 | 18.000 | 30.100 | 52.500 | 36.700 | 20.500 | 10.600 | 8.000 |
| 16 | 20.100 | 27.000 | 14.000 | 20.000 | 20.000 | 16.400 | 30.100 | 54.500 | 35.100 | 19.200 | 10.500 | 8.000 |
| 17 | 26.000 | 27.000 | 14.000 | 18.500 | 20.000 | 19.900 | 33.100 | 56.600 | 35.000 | 18.600 | 10.500 | 8.000 |
| 18 | 26.000 | 27.000 | 16.800 | 17.000 | 20.100 | 20.000 | 37.400 | 61.100 | 35.400 | 19.100 | 10.500 | 4.200 |
| 19 | 19.100 | 27.000 | 20.000 | 18.900 | 20.000 | 18.500 | 39.000 | 62.000 | 32.900 | 18.100 | 10.600 | 4.000 |
| 20 | 17.500 | 26.900 | 19.100 | 21.200 | 21.900 | 17.000 | 39.700 | 62.200 | 30.000 | 17.000 | 10.500 | 10.000 |
| 21 | 15.700 | 27.000 | 19.100 | 22.500 | 25.100 | 15.500 | 39.300 | 62.800 | 30.000 | 17.000 | 10.400 | 10.100 |
| 22 | 15.000 | 27.000 | 20.100 | 22.500 | 25.100 | 14.100 | 40.000 | 63.600 | 29.900 | 17.000 | 9.100 | 9.000 |
| 23 | 17.700 | 26.900 | 19.900 | 22.400 | 25.000 | 17.200 | 40.600 | 64.700 | 29.900 | 17.000 | 7.300 | 8.200 |
| 24 | 19.500 | 27.000 | 18.000 | 21.100 | 25.000 | 20.000 | 40.800 | 66.100 | 30.000 | 17.000 | 7.100 | 8.000 |
| 25 | 17.300 | 27.000 | 18.000 | 16.400 | 25.000 | 20.000 | 42.100 | 67.300 | 30.200 | 17.000 | 8.000 | 9.500 |
| 26 | 16.900 | 25.000 | 17.000 | 19.800 | 25.100 | 21.000 | 43.700 | 68.600 | 30.100 | 17.000 | 7.900 | 11.000 |
| 27 | 17.200 | 26.900 | 15.100 | 19.900 | 24.300 | 23.100 | 45.500 | 69.800 | 29.800 | 17.000 | 7.100 | 10.400 |
| 28 | 14.900 | 27.000 | 15.000 | 19.900 | 23.100 | 24.000 | 46.800 | 71.800 | 30.000 | 13.800 | 4.500 | 10.000 |
| 29 | 13.900 | 26.900 | 13.700 | 19.800 |  | 24.100 | 47.600 | 73.900 | 30.000 | 12.200 | 4.600 | 11.300 |
| 30 | 15.000 | 26.300 | 17.500 | 19.900 |  | 21.800 | 48.700 | 75.300 | 33.500 | 12.500 | 4.700 | 11.000 |
| 31 | 16.000 |  | 16.700 | 21.000 |  | 18.500 |  | 76.200 |  | 13.700 | 5.000 |  |

# RADIOACTIVITY DETERMINATIONS

**STATION LOCATION** PLATTE RIVER ABOVE
PLATTSMOUTH, NEBRASKA 86

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 5 | 61 | 10 | 14 | 6 | 4 | 3 | 3 | 9 | 5 | 51 | 13 | 46 | 12 | 97 | 18 | | | | | | |
| 10 | 11 | 61 | 10 | 27 | 2 | 6 | 0 | 2 | 2 | 6 | 40 | 15 | 17 | 11 | 57 | 19 | | | | | | |
| 10 | 18 | 61 | 11 | 15 | 10 | 9 | 11 | 6 | 21 | 11 | 57 | 18 | 29 | 11 | 86 | 21 | | | | | | |
| 10 | 25 | 61 | 11 | 6 | 4 | 5 | 9 | 4 | 13 | 6 | 40 | 14 | 22 | 11 | 62 | 18 | | | | | | |
| 10 | 31 | 61 | 11 | 7 | 8 | 5 | 4 | 3 | 12 | 6 | 29 | 14 | 39 | 12 | 68 | 18 | | | | | | |
| 11 | 21 | 61 | 12 | 4 | 4 | 4 | 6 | 3 | 10 | 5 | 107 | 15 | 86 | 12 | 193 | 19 | | | | | | |
| 11 | 28 | 61 | 12 | 8 | 2 | 3 | 8 | 4 | 10 | 5 | 17 | 15 | 43 | 15 | 60 | 21 | | | | | | |
| 12 | 5 | 61 | 12 | 14 | 1 | 2 | 8 | 4 | 9 | 4 | 14 | 10 | 33 | 12 | 47 | 16 | | | | | | |
| 12 | 18 | 61 | 12 | 28 | 0 | 1 | 5 | 3 | 5 | 3 | 7 | 9 | 26 | 13 | 33 | 16 | | | | | | |
| 12 | 26 | 61 | 1 | 11 | 0 | 1 | 10 | 4 | 10 | 4 | 17 | 9 | 33 | 12 | 50 | 15 | | | | | | |
| 1 | 2 | 62 | 1 | 16 | 1 | 1 | 7 | 4 | 8 | 4 | 14 | 12 | 33 | 15 | 47 | 19 | | | | | | |
| 1 | 9 | 62 | 1 | 18 | 27 | 14 | 8 | 4 | 35 | 15 | 284 | 25 | 35 | 11 | 319 | 27 | | | | | | |
| 1 | 16 | 62 | 1 | 30 | 0 | 1 | 10 | 4 | 10 | 4 | 13 | 9 | 32 | 12 | 45 | 15 | | | | | | |
| 1 | 23 | 62 | 2 | 6 | 1 | 1 | 8 | 4 | 9 | 4 | 1 | 8 | 27 | 12 | 28 | 14 | | | | | | |
| 1 | 30 | 62 | 2 | 12 | 0 | 2 | 5 | 4 | 5 | 4 | 58 | 10 | 56 | 12 | 114 | 16 | | | | | | |
| 2 | 6 | 62 | 2 | 19 | 2 | 2 | 7 | 3 | 9 | 4 | 42 | 11 | 52 | 11 | 94 | 16 | | | | | | |
| 2 | 13 | 62 | 2 | 28 | 1 | 2 | 7 | 4 | 8 | 4 | 36 | 12 | 36 | 12 | 72 | 17 | | | | | | |
| 2 | 20 | 62 | 3 | 8 | 2 | 2 | 5 | 3 | 7 | 4 | 41 | 11 | 49 | 11 | 90 | 16 | | | | | | |
| 2 | 27 | 62 | 3 | 14 | 1 | 1 | 7 | 4 | 8 | 4 | 11 | 8 | 51 | 12 | 62 | 14 | | | | | | |
| 3 | 6 | 62 | 3 | 19 | 0 | 1 | 6 | 4 | 6 | 4 | 22 | 9 | 44 | 12 | 66 | 15 | | | | | | |
| 3 | 13 | 62 | 3 | 27 | 3 | 4 | 6 | 3 | 9 | 5 | 420 | 20 | 135 | 13 | 555 | 24 | | | | | | |
| 3 | 20 | 62 | 4 | 3 | 7 | 5 | 1 | 1 | 8 | 5 | 292 | 42 | 84 | 7 | 376 | 43 | | | | | | |
| 4 | 3 | 62 | 4 | 17 | 30 | 13 | 5 | 3 | 35 | 13 | 109 | 32 | 53 | 11 | 162 | 35 | | | | | | |
| 4 | 10 | 62 | 4 | 24 | 4 | 3 | 6 | 3 | 10 | 4 | 57 | 13 | 54 | 12 | 111 | 17 | | | | | | |
| 4 | 17 | 62 | 5 | 24 | 5 | 3 | 8 | 3 | 13 | 4 | 24 | 19 | 52 | 18 | 76 | 26 | | | | | | |
| 4 | 24 | 62 | 5 | 29 | 8 | 4 | 0 | 2 | 8 | 4 | 15 | 12 | 32 | 14 | 47 | 18 | | | | | | |
| 5 | 1 | 62 | 6 | 5 | 0 | 1 | 10 | 4 | 10 | 4 | 19 | 12 | 38 | 14 | 57 | 18 | | | | | | |
| 5 | 8 | 62 | 6 | 15 | 8 | 5 | 8 | 4 | 16 | 6 | 62 | 18 | 30 | 14 | 92 | 23 | | | | | | |
| 5 | 15 | 62 | 6 | 21 | 0 | 1 | 4 | 3 | 4 | 3 | 20 | 14 | 40 | 17 | 60 | 22 | | | | | | |
| 5 | 22 | 62 | 6 | 27 | 18 | 33 | 2 | 2 | 20 | 33 | 600 | 75 | 48 | 9 | 648 | 76 | | | | | | |
| 5 | 29 | 62 | 8 | 1 | 79 | 64 | 1 | 2 | 80 | 64 | 920 | 142 | 36 | 14 | 956 | 143 | | | | | | |
| 6 | 5 | 62 | 7 | 6 | 11 | 23 | 2 | 2 | 13 | 23 | 427 | 110 | 59 | 17 | 486 | 111 | | | | | | |
| 6 | 12 | 62 | 7 | 10 | 35 | 22 | 1 | 2 | 36 | 22 | 262 | 87 | 65 | 9 | 327 | 87 | | | | | | |
| 6 | 19 | 62 | 7 | 20 | 3 | 5 | 2 | 1 | 5 | 5 | 55 | 16 | 26 | 6 | 81 | 17 | | | | | | |
| 6 | 26 | 62 | 7 | 24 | 4 | 11 | 4 | 3 | 8 | 11 | 158 | 74 | 69 | 10 | 227 | 75 | | | | | | |
| 7 | 3 | 62 | 8 | 6 | 5 | 5 | 5 | 3 | 10 | 6 | 63 | 20 | 59 | 15 | 122 | 25 | | | | | | |
| 7 | 9 | 62 | 7 | 25 | 2 | 4 | 4 | 2 | 6 | 4 | 161 | 24 | 66 | 17 | 227 | 29 | | | | | | |
| 7 | 17 | 62 | 8 | 27 | 15 | 11 | 3 | 2 | 18 | 11 | 208 | 93 | 55 | 10 | 263 | 94 | | | | | | |
| 7 | 24 | 62 | 8 | 21 | 22 | 25 | 4 | 2 | 26 | 25 | 365 | 145 | 62 | 9 | 427 | 145 | | | | | | |
| 7 | 31 | 62 | 8 | 22 | 16 | 12 | 1 | 2 | 17 | 12 | 149 | 45 | 44 | 14 | 193 | 47 | | | | | | |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** PLATTE RIVER ABOVE

PLATTSMOUTH, NEBRASKA 86

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 8 | 7 | 62 | 8 | 28 | 18 | 18 | 2 | 2 | 20 | 18 | 264 | 81 | 60 | 9 | 324 | 81 | | | | | | |
| 8 | 14 | 62 | 9 | 6 | 6 | 7 | 2 | 2 | 8 | 7 | 73 | 56 | 47 | 14 | 120 | 58 | | | | | | |
| 8 | 22 | 62 | 9 | 5 | 5 | 7 | 2 | 4 | 7 | 8 | 113 | 35 | 74 | 16 | 187 | 38 | | | | | | |
| 8 | 28 | 62 | 10 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 23 | 13 | 46 | 16 | 69 | 21 | | | | | | |
| 9 | 4 | 62 | 9 | 18 | 5 | 8 | 2 | 2 | 7 | 8 | 303 | 67 | 55 | 13 | 358 | 78 | | | | | | |
| 9 | 11 | 62 | 9 | 28 | 13 | 9 | 0 | 1 | 13 | 9 | 164 | 80 | 46 | 17 | 210 | 82 | | | | | | |
| 9 | 18 | 62 | 10 | 15 | 3 | 4 | 0 | 1 | 3 | 4 | 43 | 31 | 26 | 13 | 69 | 36 | | | | | | |
| 9 | 25 | 62 | 10 | 24 | 2 | 2 | 2 | 3 | 4 | 4 | 28 | 15 | 39 | 16 | 67 | 22 | | | | | | |

# PLANKTON POPULATION

**STATE** NEBRASKA

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** PLATTE RIVER ABOVE
PLATTSMOUTH, NEBRASKA 86

| DATE OF SAMPLE | | | | ALGAE (Number per milliliter) | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 5 | 61 | 22100 | 0 | 20 | 2030 | 0 | 1160 | 0 | 13350 | 5510 | 810 | 2940 | 71 | 6 | 68 | 5 | 99 | 4 | 38 | 4 | 69 | 3 | 97 | 3 | 51 | 3 | 92 | 2 | 91 | 2 | 81 | 2 |
| 10 | 17 | 61 | 6200 | 0 | 0 | 580 | 0 | 190 | 0 | 1780 | 3620 | 250 | 2480 | 84 | 7 | 88 | 3 | 38 | 2 | 87 | 1 | 51 | 1 | 92 | 1 | | | | | | | | |
| 11 | 7 | 61 | 5700 | 0 | 40 | 390 | 0 | 170 | 20 | 1590 | 3480 | 540 | 2840 | 84 | 4 | 69 | 2 | 92 | 2 | 97 | 2 | 38 | 2 | 88 | 2 | 98 | 1 | | | | | | |
| 11 | 21 | 61 | 7200 | 20 | 40 | 210 | 0 | 80 | 0 | 1470 | 5360 | 290 | 4260 | 71 | 3 | 97 | 3 | 88 | 2 | 92 | 2 | 98 | 2 | 69 | 1 | 99 | 1 | | | | | | |
| 12 | 5 | 61 | 6400 | 0 | 90 | 410 | 0 | 450 | 0 | 2000 | 3470 | 590 | 2680 | 71 | 4 | 84 | 3 | 68 | 3 | 88 | 2 | 97 | 2 | 51 | 2 | 69 | 2 | 92 | 1 | 38 | 1 | 87 | 1 |
| 1 | 2 | 62 | 1200 | 0 | 0 | 20 | 0 | 40 | 0 | 270 | 910 | 120 | 460 | 84 | 2 | | | | | | | | | | | | | | | | | | |
| 1 | 16 | 62 | 1100 | 0 | 0 | 0 | 0 | 50 | 0 | 200 | 880 | 360 | 340 | 84 | 2 | | | | | | | | | | | | | | | | | | |
| 2 | 6 | 62 | 300 | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 290 | 70 | 340 | | | | | | | | | | | | | | | | | | | | |
| 2 | 13 | 62 | 600 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 510 | 50 | 690 | 87 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 6 | 62 | 600 | 0 | 0 | 0 | 0 | 80 | 0 | 150 | 370 | 0 | 120 | | | | | | | | | | | | | | | | | | | | |
| 4 | 3 | 62 | 500 | 0 | 0 | 0 | 0 | 90 | 0 | 130 | 310 | 250 | 1520 | | | | | | | | | | | | | | | | | | | | |
| 4 | 17 | 62 | 8100 | 20 | 0 | 190 | 0 | 890 | 0 | 4530 | 2510 | 1370 | 1080 | 71 | 5 | 51 | 3 | 88 | 2 | 84 | 2 | 91 | 1 | 97 | 1 | 92 | 1 | | | | | | |
| 5 | 4 | 62 | 86800 | 3020 | 40 | 30100 | 0 | 8280 | 120 | 20740 | 24470 | 8450 | 5260 | 71 | 8 | 24 | 7 | 25 | 7 | 88 | 6 | 51 | 6 | 82 | 4 | 38 | 4 | 97 | 4 | 98 | 3 | 57 | 3 |
| 5 | 15 | 62 | 97700 | 210 | 8310 | 45580 | 420 | 840 | 0 | 21560 | 20760 | 12170 | 8310 | 24 | 8 | 71 | 7 | 38 | 7 | 17 | 6 | 68 | 6 | 88 | 6 | 92 | 5 | 87 | 4 | 98 | 4 | 97 | 3 |
| 6 | 5 | 62 | 1600 | 0 | 0 | 200 | 0 | 70 | 0 | 270 | 1070 | 160 | 1610 | 88 | 2 | 84 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 6 | 19 | 62 | 8700 | 40 | 0 | 1610 | 170 | 1160 | 80 | 870 | 4760 | 120 | 410 | 88 | 3 | 84 | 3 | 38 | 3 | 57 | 3 | 71 | 2 | 24 | 2 | 92 | 2 | 51 | 2 | 87 | 2 | 68 | 2 |
| 7 | 3 | 62 | 36500 | 300 | 170 | 14560 | 550 | 660 | 0 | 10170 | 10090 | 1820 | 4180 | 38 | 6 | 68 | 6 | 24 | 5 | 88 | 5 | 71 | 4 | 92 | 3 | 51 | 3 | 50 | 2 | 84 | 2 | 99 | 2 |
| 7 | 17 | 62 | 10600 | 0 | 110 | 570 | 0 | 210 | 0 | 5380 | 4330 | 1480 | 1370 | 68 | 5 | 71 | 4 | 88 | 4 | 97 | 2 | 98 | 2 | 38 | 2 | 92 | 1 | 51 | 1 | 69 | 1 | 84 | 1 |
| 8 | 7 | 62 | 6300 | 0 | 0 | 890 | 230 | 390 | 0 | 1240 | 3520 | 290 | 500 | 88 | 3 | 68 | 3 | 38 | 3 | 87 | 2 | 84 | 2 | 97 | 2 | 51 | 2 | 50 | 1 | 74 | 1 | 71 | 1 |
| 8 | 20 | 62 | 70300 | 1990 | 410 | 22600 | 0 | 2440 | 0 | 19040 | 23810 | 6000 | 4550 | 68 | 7 | 38 | 7 | 24 | 5 | 25 | 5 | 51 | 4 | 44 | 4 | 3 | 4 | 29 | 3 | 69 | 3 | 33 | 2 |
| 9 | 4 | 62 | 19800 | 0 | 0 | 1560 | 0 | 150 | 0 | 11350 | 6710 | 2740 | 1940 | 71 | 6 | 68 | 5 | 88 | 5 | 38 | 3 | 87 | 3 | 91 | 2 | 74 | 2 | 86 | 2 | 24 | 2 | 69 | 1 |
| 9 | 18 | 62 | 21600 | 500 | 250 | 9930 | 0 | 380 | 0 | 8060 | 2520 | 9380 | 5450 | 38 | 6 | 68 | 5 | 71 | 5 | 68 | 4 | 24 | 4 | 25 | 3 | 69 | 3 | 26 | 3 | 3 | 2 | 51 | 2 |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** NEBRASKA
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER
**STATION LOCATION** PLATTE RIVER ABOVE
PLATTSMOUTH, NEBRASKA 086

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA Number per ml. | PROTOZOA (Identifiable) Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | | |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| 10 | 5 | 61 | 78 | 28 | 46 | 23 | 92 | 6 | 74 | 5 | 38 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 17 | 61 | 46 | 30 | 71 | 22 | 73 | 6 | 80 | 4 | 38 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 7 | 61 | 46 | 40 | 92 | 10 | 78 | 9 | 71 | 5 | 36 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 21 | 61 | 46 | 31 | 78 | 15 | 80 | 8 | 92 | 7 | 39 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 5 | 61 | 46 | 31 | 78 | 8 | 71 | 8 | 92 | 7 | 46 | 680 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 1 | 2 | 62 | 46 | 34 | 71 | 6 | 73 | 5 | 78 | 5 | 50 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 16 | 62 | 46 | 32 | 71 | 5 | 17 | 5 | 48 | 4 | 54 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 2 | 6 | 62 | 71 | 17 | 46 | 13 | 65 | 11 | 36 | 8 | 51 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 13 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 6 | 62 | 48 | 24 | 78 | 17 | 74 | 8 | 86 | 8 | 43 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 3 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 17 | 62 | 80 | 37 | 45 | 13 | 48 | 11 | 71 | 10 | 29 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 1 |
| 5 | 4 | 62 | 92 | 27 | 45 | 20 | 71 | 20 | 36 | 5 | 28 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 15 | 62 | 46 | 19 | 82 | 14 | 48 | 13 | 26 | 8 | 46 | 300 | 0 | 13 | 2 | 2 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 5 | 62 | 71 | 18 | 46 | 15 | 92 | 9 | 73 | 9 | 49 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 19 | 62 | 46 | 22 | 71 | 12 | 47 | 9 | 92 | 7 | 50 | 120 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 3 | 62 | 71 | 18 | 46 | 18 | 92 | 5 | 26 | 5 | 54 | 0 | 0 | 2 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 7 | 17 | 62 | 46 | 26 | 71 | 12 | 73 | 8 | 78 | 7 | 47 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 7 | 62 | 46 | 26 | 71 | 8 | 73 | 6 | 26 | 4 | 56 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 20 | 62 | 26 | 18 | 46 | 14 | 73 | 8 | 56 | 4 | 56 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 82 | 43 | 26 | 20 | 71 | 4 | 72 | 4 | 29 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 18 | 62 | 26 | 40 | 82 | 33 | 71 | 6 | 46 | 3 | 18 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

## NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** NEBRASKA

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRAR

**STATION LOCATION** PLATTE RIVER ABOVE

PLATTSMOUTH, NEBRASKA

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTA DISSOLV SOLIDS mg/l |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | |
| 10 | 11 | 61 | - | - | - | - | 28 | - | - | 1.6 | 103 | 148 | 212 | - | 2100 | 64 | .9 | 47 |
| 10 | 17 | 61 | 18.0 | 11.5 | - | - | 45 | - | - | .8 | 79 | 184 | 168 | - | 800 | 72 | .7 | 51 |
| 10 | 25 | 61 | 11.0 | 11.6 | 8.0 | - | 26 | - | - | .4 | 94 | 176 | 176 | - | 260 | 88 | .9 | 5 |
| 10 | 31 | 61 | 11.0 | 10.5 | 7.5 | - | 30 | - | - | .6 | 96 | 164 | 168 | - | 300 | 78 | 1.0 | 46 |
| 11 | 7 | 61 | 6.0 | 12.7 | 7.4 | - | 21 | - | - | .9 | 70 | 168 | 164 | - | 200 | 64 | .8 | 5 |
| 11 | 15 | 61 | 6.0 | 12.7 | 8.3 | - | 35 | - | - | .6 | 72 | 188 | 176 | - | 170 | 90 | .8 | |
| 11 | 21 | 61 | 5.0 | 13.3 | 8.0 | - | 34 | - | - | .7 | 72 | 168 | 176 | - | 220 | 88 | 1.0 | 47 |
| 12 | 5 | 61 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | - | |
| 12 | 18 | 61 | 3.0 | 10.0 | 7.5 | 1.8 | 44 | - | - | 1.1 | 167 | 240 | 242 | 5 | 355 | 112 | 1.3 | 6 |
| 12 | 26 | 61 | 3.0 | 10.9 | 7.7 | .8 | 27 | - | - | .8 | 107 | 208 | 232 | - | 330 | 121 | .9 | 5 |
| 1 | 2 | 62 | 4.0 | 10.5 | 7.4 | - | 9- | - | - | 1.0 | 89 | 184 | 224 | - | 40 | 83 | .7 | 5 |
| 1 | 9 | 62 | 2.0 | 11.8 | 7.6 | 20.0 | 97 | - | - | 1.1 | 82 | 208 | 260 | - | 640 | 95 | 1.4 | |
| 1 | 16 | 62 | 3.0 | 10.7 | 7.6 | 1.8 | 31 | - | - | 2.0 | 82 | 208 | 240 | - | 25 | 103 | .8 | 5 |
| 1 | 23 | 62 | 2.0 | 8.6 | 7.4 | 1.8 | 22 | - | - | 1.9 | 80 | 200 | 168 | - | 28 | 96 | 1.0 | 5 |
| 1 | 30 | 62 | 4.0 | 9.2 | 7.5 | 5.4 | 40 | - | - | - | 80 | 168 | 124 | - | 96 | 120 | .5 | 5 |
| 2 | 6 | 62 | 3.0 | 12.1 | 7.6 | 4.8 | 16 | - | - | 1.5 | 43 | 132 | 116 | - | 208 | 106 | .5 | |
| 2 | 13 | 62 | - | - | 7.7 | 13.8 | 38 | - | - | 3.9 | 71 | 152 | 140 | - | 80 | 118 | .3 | 5 |
| 2 | 19 | 62 | 2.8 | 7.4 | 8.1 | - | 113 | - | - | .7 | 27 | 156 | 160 | - | 1304 | 80 | .9 | 3 |
| 2 | 20 | 62 | 5.0 | 13.4 | 7.0 | 7.2 | 27 | - | - | 1.0 | 35 | 172 | 132 | - | 141 | 106 | 2.2 | 4 |
| 2 | 27 | 62 | - | - | 7.3 | 4.8 | 31 | - | - | 1.0 | 55 | 228 | 172 | - | 76 | 119 | 2.0 | |
| 3 | 6 | 62 | 4.0 | 11.3 | 7.8 | 6.6 | 26 | - | - | .3 | 86 | 212 | 172 | - | 40 | 112 | 1.0 | 6 |
| 3 | 13 | 62 | 4.0 | 11.2 | 7.3 | 6.6 | 44 | - | - | .9 | 59 | 144 | 120 | - | 271 | 80 | .6 | 3 |
| 3 | 20 | 62 | 6.0 | - | 7.3 | 13.8 | 86 | - | - | 1.0 | 41 | - | 88 | - | 1968 | 65 | .3 | 3 |
| 4 | 3 | 62 | - | - | 7.3 | 4.2 | 94 | - | - | .6 | 35 | 156 | 136 | - | 670 | 104 | .6 | |
| 4 | 10 | 62 | 12.0 | 10.8 | 7.5 | 3.6 | 47 | - | - | .9 | 47 | 180 | 160 | - | 265 | 91 | .6 | 4 |
| 4 | 24 | 62 | 21.0 | 10.3 | 7.3 | 2.0 | 31 | - | - | 2.0 | 61 | 192 | 232 | - | 68 | 112 | .6 | 5 |
| 5 | 1 | 62 | 16.0 | 10.8 | 8.0 | 3.0 | 38 | - | - | 2.3 | 65 | 184 | 220 | - | 84 | 112 | 1.1 | |
| 5 | 15 | 62 | 25.0 | 8.7 | 7.3 | - | 35 | - | - | 1.2 | 82 | 192 | 208 | - | 36 | 80 | 1.1 | 5 |
| 5 | 22 | 62 | 25.0 | - | 7.8 | - | 150 | - | - | .4 | 41 | 128 | 140 | - | 1800 | 48 | 1.3 | 3 |
| 5 | 29 | 62 | - | - | 7.2 | 21.0 | 420 | - | - | 3.2 | - | 108 | 108 | - | 5050 | 70 | .7 | 2 |
| 6 | 5 | 62 | 22.0 | - | 7.6 | 11.4 | 124 | - | - | 7.0 | 59 | 148 | 144 | - | 1680 | 54 | 1.1 | 2 |
| 6 | 12 | 62 | 26.0 | - | 7.2 | 4.8 | 121 | - | - | 2.1 | 29 | 132 | 136 | - | 1660 | 53 | .9 | 2 |
| 6 | 26 | 62 | 26.0 | 7.2 | 7.3 | 6.3 | 76 | - | - | .6 | 41 | 156 | 168 | - | 623 | 73 | 1.0 | 3 |
| 7 | 3 | 62 | 26.0 | 8.3 | 8.1 | 1.8 | 64 | - | - | 1.0 | 45 | 176 | 172 | - | 381 | 55 | 1.6 | 3 |
| 7 | 10 | 62 | 26.0 | 7.3 | 7.7 | 3.6 | 102 | - | - | .1 | 61 | 184 | 176 | - | 401 | 61 | 1.1 | 4 |
| 7 | 17 | 62 | 27.0 | 7.3 | 7.7 | 7.8 | 122 | - | - | .0 | 33 | 164 | 160 | - | 920 | 48 | 1.0 | 2 |
| 7 | 24 | 62 | 28.0 | 6.7 | 7.8 | 6.9 | 113 | - | - | .0 | 39 | 116 | 160 | - | 2096 | 69 | 1.0 | 2 |
| 7 | 31 | 62 | 25.0 | 7.5 | 7.5 | 7.8 | 87 | - | - | .0 | 75 | 140 | 164 | - | 1060 | 48 | .8 | 2 |
| 8 | 7 | 62 | 28.0 | 6.9 | 7.7 | 9.0 | 108 | - | - | .0 | 59 | 136 | 164 | - | 2520 | 46 | 1.4 | 2 |

**MINOR BASIN** LOWER MISSOURI BELOW NIOBRARA RIVER

**STATION LOCATION** PLATTE RIVER ABOVE

PLATTSMOUTH, NEBRASKA 86

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 8 | 14 | 62 | 28.0 | 8.4 | 8.1 | 5.6 | 44 | - | - | .3 | 63 | 176 | 160 | - | 335 | 51 | 1.2 | 404 | - |
| 8 | 20 | 62 | 27.0 | 8.4 | 7.9 | 2.4 | 39 | - | - | .3 | 80 | 172 | 172 | - | 105 | 69 | 1.2 | 450 | - |
| 8 | 28 | 62 | 26.0 | 8.6 | 8.3 | 2.4 | 37 | - | - | .5 | 78 | 188 | 196 | - | 122 | 42 | 1.0 | 432 | - |
| 9 | 4 | 62 | 16.0 | 8.4 | 8.1 | 3.3 | 65 | - | - | .2 | 55 | 144 | 164 | - | 726 | 28 | 1.0 | 334 | - |
| 9 | 11 | 62 | 19.0 | 8.8 | 7.9 | 4.8 | 44 | - | - | .2 | 69 | 144 | 160 | - | 529 | 40 | .8 | 384 | - |
| 9 | 18 | 62 | 24.0 | 8.6 | 7.9 | 3.6 | 43 | - | - | .3 | 90 | 164 | 172 | - | 109 | 47 | .8 | 366 | - |
| 9 | 25 | 62 | 22.0 | 9.5 | 7.9 | 4.2 | 47 | - | - | .5 | 90 | 160 | 172 | - | 102 | 61 | .7 | 346 | - |

## STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at South Bend, Nebraska
Operated by U.S. Geological Survey

| | |
|---|---|
| STATE | Nebraska |
| MAJOR BASIN | Missouri River |
| MINOR BASIN | Lower Missouri below Niob |
| STATION LOCATION | Platte River above<br>Plattsmouth, Nebraska |

| Day | October | November | December | January | February | March | April | May | June | July | August | Septe |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.060 | 3.980 | 5.180 | 3.300 | 5.000 | 3.300 | 32.400 | 6.190 | 10.300 | 6.400 | 8.250 | 5. |
| 2 | 3.710 | 4.520 | 4.920 | 3.400 | 5.500 | 3.600 | 20.400 | 6.400 | 9.640 | 5.920 | 6.780 | 4. |
| 3 | 3.360 | 4.740 | 5.000 | 3.700 | 6.000 | 4.000 | 15.400 | 5.300 | 13.300 | 6.130 | 6.190 | 3. |
| 4 | 3.290 | 4.610 | 5.140 | 4.000 | 6.400 | 4.500 | 14.300 | 5.900 | 14.600 | 7.000 | 9.420 | 3. |
| 5 | 3.400 | 4.690 | 4.100 | 4.100 | 6.800 | 5.200 | 14.300 | 5.610 | 10.400 | 6.610 | 10.300 | 3. |
| 6 | 3.140 | 4.960 | 4.100 | 4.200 | 7.000 | 5.800 | 12.400 | 5.000 | 12.800 | 6.560 | 8.990 | 3. |
| 7 | 3.140 | 4.610 | 4.500 | 4.200 | 6.800 | 6.200 | 12.800 | 4.750 | 20.400 | 7.280 | 7.750 | 3. |
| 8 | 3.140 | 4.230 | 4.600 | 4.100 | 6.300 | 6.400 | 10.200 | 4.400 | 31.400 | 6.720 | 8.000 | 3. |
| 9 | 2.820 | 5.000 | 4.000 | 3.900 | 6.000 | 6.200 | 10.600 | 4.000 | 38.400 | 5.980 | 7.050 | 4. |
| 10 | 5.110 | 4.650 | 2.500 | 3.500 | 5.800 | 6.000 | 7.750 | 3.700 | 28.000 | 6.130 | 7.000 | 4. |
| 11 | 7.660 | 4.690 | 1.200 | 2.900 | 5.800 | 5.800 | 6.880 | 4.170 | 21.800 | 7.280 | 6.240 | 4. |
| 12 | 6.190 | 5.000 | 1.100 | 3.000 | 6.000 | 5.700 | 6.610 | 4.260 | 23.300 | 7.510 | 5.510 | 3. |
| 13 | 4.740 | 4.920 | 1.000 | 3.000 | 6.500 | 5.700 | 7.750 | 3.660 | 22.600 | 6.940 | 4.700 | 3. |
| 14 | 4.310 | 4.920 | 1.100 | 3.000 | 7.800 | 5.700 | 7.750 | 3.570 | 21.100 | 7.940 | 4.410 | 3. |
| 15 | 4.270 | 5.050 | 1.200 | 2.900 | 8.700 | 5.700 | 6.610 | 3.210 | 17.800 | 8.790 | 3.790 | 3. |
| 16 | 3.940 | 5.740 | 1.500 | 2.800 | 11.000 | 5.700 | 6.880 | 2.540 | 15.200 | 7.570 | 3.890 | 3. |
| 17 | 3.980 | 5.640 | 1.900 | 2.800 | 12.000 | 5.820 | 8.720 | 3.390 | 12.000 | 7.570 | 3.520 | 3. |
| 18 | 3.550 | 5.050 | 2.200 | 2.700 | 12.000 | 6.200 | 7.600 | 3.520 | 20.000 | 7.570 | 3.260 | 3. |
| 19 | 3.400 | 5.100 | 2.500 | 2.800 | 11.000 | 6.900 | 6.900 | 3.840 | 29.000 | 9.060 | 3.170 | 3. |
| 20 | 3.590 | 5.690 | 2.800 | 2.900 | 9.000 | 8.380 | 6.290 | 7.980 | 25.000 | 14.800 | 3.300 | 3. |
| 21 | 3.630 | 5.790 | 3.100 | 3.000 | 6.500 | 10.600 | 6.000 | 12.600 | 17.000 | 15.300 | 2.590 | 3. |
| 22 | 4.020 | 6.270 | 3.300 | 3.000 | 5.000 | 13.100 | 6.000 | 16.400 | 12.500 | 17.700 | 2.300 | 3. |
| 23 | 4.020 | 6.070 | 3.500 | 2.900 | 3.500 | 17.800 | 5.870 | 14.700 | 11.000 | 14.200 | 2.340 | 3. |
| 24 | 4.140 | 5.320 | 3.600 | 3.000 | 3.100 | 25.400 | 5.800 | 15.600 | 11.000 | 10.200 | 2.800 | 3. |
| 25 | 4.520 | 5.000 | 3.700 | 3.200 | 3.000 | 27.500 | 6.400 | 10.600 | 11.000 | 8.790 | 2.920 | 3. |
| 26 | 4.390 | 5.000 | 3.800 | 3.300 | 3.000 | 46.100 | 6.300 | 9.280 | 10.700 | 8.250 | 2.590 | 3. |
| 27 | 4.270 | 5.230 | 3.700 | 3.500 | 3.000 | 50.700 | 6.100 | 8.790 | 10.000 | 6.720 | 2.460 | 3. |
| 28 | 3.900 | 5.280 | 3.600 | 3.600 | 3.100 | 45.400 | 5.800 | 10.600 | 8.200 | 8.060 | 2.260 | 3. |
| 29 | 4.140 | 4.820 | 3.500 | 3.800 | | 52.900 | 6.200 | 18.500 | 6.880 | 8.860 | 2.020 | 3. |
| 30 | 4.690 | 5.280 | 3.400 | 4.000 | | 43.600 | 6.200 | 11.000 | 7.880 | 8.990 | 2.100 | 3. |
| 31 | 4.390 | | 3.300 | 4.400 | | 35.300 | | 9.060 | | 8.520 | 7.220 | |

**RESULTS IN MICROGRAMS PER LITER**
(Parts per billion)

**MINOR BASIN** POTOMAC RIVER

**STATION LOCATION** POTOMAC RIVER AT

GREAT FALLS, MARYLAND

40

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 16 | 61 | 10 | 30 | 3358 | 288 | 111 | 177 | 3 | 31 | 29 | 3 | 1 | 24 | 1 | 9 | 9 | 2 | 28 |
| 12 | 4 | 61 | 12 | 18 | 2993 | 292 | 66 | 226 | 3 | 18 | 21 | 4 | 4 | 12 | 1 | 5 | 3 | 1 | 15 |
| 1 | 8 | 62 | 1 | 29 | 3768 | 256 | 92 | 164 | 4 | 25 | 24 | 2 | 2 | 20 | 0 | 10 | 7 | 2 | 20 |
| 2 | 26 | 62 | 3 | 18 | 3186 | 260 | 95 | 165 | 3 | 24 | 26 | 3 | 2 | 20 | 1 | 12 | 7 | 2 | 21 |
| 4 | 18 | 62 | 5 | 1 | 3076 | 238 | 91 | 147 | 2 | 23 | 22 | 3 | 2 | 17 | 0 | 10 | 8 | 1 | 25 |
| 5 | 21 | 62 | 5 | 28 | 3870 | 219 | 108 | 111 | 10 | 31 | 23 | 2 | 1 | 18 | 2 | 11 | 11 | 2 | 20 |
| 6 | 18 | 62 | 6 | 25 | 4281 | 194 | 96 | 98 | 3 | 28 | 24 | 3 | 1 | 18 | 2 | 11 | 9 | 2 | 19 |
| 7 | 16 | 62 | 7 | 25 | 3317 | 215 | 74 | 141 | 2 | 20 | 26 | 2 | 1 | 21 | 2 | 7 | 5 | 2 | 12 |
| 8 | 17 | 62 | 8 | 27 | 4425 | 178 | 88 | 90 | 4 | 26 | 25 | 1 | 1 | 22 | 1 | 10 | 6 | 3 | 14 |
| 9 | 17 | 62 | 9 | 26 | 4170 | 305 | 95 | 210 | 4 | 32 | 24 | 2 | 1 | 20 | 1 | 10 | 5 | 3 | 17 |

NATIONAL WATER QUALITY NETWORK

# RADIOACTIVITY DETERMINATIONS

MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION POTOMAC RIVER AT GREAT FALLS, MARYLAND

| DATE SAMPLE TAKEN | | | DATE OF DETERMINATION | | RADIOACTIVITY IN WATER | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g |
| 10 | 2 | 61 | 10 | 16 | - | - | - | - | - | - | 0 | 5 | [illegible] | [illegible] | [illegible] | 9 | | | | | |
| 10 | 9 | 61 | 10 | 16 | 0 | 1 | 1 | 1 | 1 | 1 | [illegible] | 4 | [illegible] | [illegible] | [illegible] | 8 | | | | | |
| 10 | 23 | 61 | 11 | 2 | - | - | - | - | - | - | 4 | [illegible] | [illegible] | [illegible] | [illegible] | 9 | | | | | |
| 10 | 30 | 61 | 11 | 20 | - | - | - | - | - | - | 9 | 4 | [illegible] | [illegible] | [illegible] | 6 | | | | | |
| 11 | 6 | 61 | 11 | 17 | - | - | - | - | - | - | 18 | [illegible] | [illegible] | [illegible] | [illegible] | 6 | | | | | |
| 11 | 13 | 61 | 11 | 24 | 1 | 1 | 1 | 1 | 2 | 1 | 5 | 6 | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 11 | 20 | 61 | 11 | 30 | - | - | - | - | - | - | 17 | 4 | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 11 | 27 | 61 | 12 | 4 | - | - | - | - | - | - | 51 | 6 | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 12 | 4 | 61 | 12 | 14 | - | - | - | - | - | - | 6 | 6 | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 12 | 11 | 61 | 12 | 19 | - | - | - | - | - | - | 26 | 4 | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 12 | 18 | 61 | 12 | 28 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 12 | 25 | 61 | 1 | 5 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 1 | 1 | 62 | 1 | 12 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 1 | 8 | 62 | 1 | 8 | 1 | 1 | 0 | 0 | 1 | 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 1 | 15 | 62 | 1 | 31 | - | - | - | - | - | - | 4 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 1 | 22 | 62 | 1 | 31 | - | - | - | - | - | - | 14 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 1 | 29 | 62 | 2 | 6 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 2 | 5 | 62 | 2 | 14 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 2 | 12 | 62 | 2 | 20 | 0 | 1 | 0 | 1 | 0 | 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 2 | 19 | 62 | 3 | 2 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 3 | 5 | 62 | 3 | 14 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 3 | 12 | 62 | 3 | 23 | 3 | 2 | 0 | 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 3 | 19 | 62 | 4 | 4 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 3 | 26 | 62 | 4 | 9 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 4 | 2 | 62 | 4 | 12 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 4 | 9 | 62 | 4 | 20 | 8 | 5 | 0 | 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 4 | 23 | 62 | 5 | 23 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 4 | 30 | 62 | 5 | 25 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 5 | 7 | 62 | 6 | 18 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 5 | 14 | 62 | 6 | 19 | 0 | 1 | 0 | [illegible] | [illegible] | 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 5 | 21 | 62 | 6 | 26 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 5 | 27 | 62 | 6 | 29 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 6 | 4 | 62 | 7 | 2 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 6 | 11 | 62 | 7 | 9 | 0 | 1 | 0 | 1 | [illegible] | 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 6 | 18 | 62 | 7 | 16 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 6 | 25 | 62 | 7 | 20 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 7 | 2 | 62 | 7 | 31 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 7 | 9 | 62 | 10 | 2 | 0 | 1 | 1 | 1 | 1 | 1 | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |
| 7 | 30 | 62 | 8 | 22 | - | - | - | - | - | - | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | | | | | |

STATION LOCATION POTOMAC RIVER AT

GREAT FALLS, MARYLAND 40

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 7 | 62 | 10 | 8 | - | - | - | - | - | - | 1 | 5 | 11 | 7 | 12 | 9 | | | | | | |
| 8 | 13 | 62 | 8 | 27 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 2 | 19 | 4 | 21 | 4 | | | | | | |
| 8 | 20 | 62 | 9 | 5 | - | - | - | - | - | - | 0 | 6 | 14 | 7 | 14 | 9 | | | | | | |
| 8 | 27 | 62 | 9 | 17 | - | - | - | - | - | - | 1 | 5 | 17 | 8 | 18 | 9 | | | | | | |
| 9 | 3 | 62 | 9 | 27 | - | - | - | - | - | - | 7 | 6 | 13 | 9 | 20 | 11 | | | | | | |
| 9 | 10 | 62 | 10 | 5 | 0 | 0 | 1 | 1 | 1 | 1 | 5 | 5 | 15 | 7 | 20 | 9 | | | | | | |
| 9 | 17 | 62 | 10 | 16 | - | - | - | - | - | - | 1 | 5 | 13 | 7 | 14 | 8 | | | | | | |
| 9 | 24 | 62 | 10 | 23 | - | - | - | - | - | - | 11 | 5 | 23 | 8 | 34 | 9 | | | | | | |

**STATION LOCATION** POTOMAC RIVER AT

GREAT FALLS, MARYLAND 40

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 200 | 20 | 0 | 60 | 0 | 60 | 0 | 60 | 40 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 10 | 17 | 61 | 6600 | 20 | 0 | 270 | 0 | 990 | 0 | 5200 | 120 | 520 | 150 | 68 | 5 | 69 | 3 | 51 | 3 | 71 | 2 | 38 | 1 | | | | | | | | | | |
| 11 | 6 | 61 | 1700 | 0 | 20 | 150 | 0 | 100 | 0 | 1350 | 120 | 170 | 80 | 71 | 3 | 68 | 2 | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 20 | 0 | 70 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 1200 | 0 | 0 | 20 | 0 | 90 | 0 | 450 | 630 | 50 | 20 | 68 | 2 | 87 | 1 | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 1600 | 0 | 0 | 0 | 0 | 40 | 0 | 120 | 1410 | 20 | 480 | 82 | 3 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 200 | 0 | 540 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 220 | 20 | 110 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 1800 | 0 | 0 | 0 | 0 | 250 | 0 | 70 | 1520 | 160 | 270 | 92 | 3 | 82 | 2 | 51 | 1 | 88 | 1 | | | | | | | | | | | | |
| 3 | 5 | 62 | 700 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 620 | 0 | 300 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 400 | 0 | 20 | 0 | 0 | 20 | 0 | 70 | 250 | 20 | 420 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 500 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 410 | 0 | 100 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 600 | 0 | 0 | 0 | 0 | 70 | 0 | 70 | 420 | 0 | 690 | 87 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 1500 | 0 | 0 | 120 | 0 | 130 | 20 | 120 | 1140 | 0 | 120 | 92 | 2 | 87 | 1 | 88 | 1 | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 29900 | 40 | 300 | 2190 | 0 | 130 | 170 | 25620 | 1480 | 5490 | 760 | 71 | 8 | 68 | 4 | 24 | 2 | 81 | 2 | 38 | 2 | 40 | 2 | 17 | 1 | 44 | 1 | 88 | 1 | 25 | 1 |
| 6 | 4 | 62 | 9700 | 20 | 340 | 1650 | 0 | 440 | 110 | 6580 | 530 | 990 | 460 | 68 | 6 | 71 | 3 | 38 | 2 | 40 | 2 | 17 | 2 | 51 | 1 | 30 | 1 | 57 | 1 | 92 | 1 | | |
| 6 | 18 | 62 | 800 | 0 | 0 | 290 | 0 | 410 | 0 | 80 | 40 | 40 | 0 | 57 | 2 | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 22500 | 1560 | 80 | 12240 | 0 | 630 | 590 | 5570 | 1820 | 1600 | 420 | 68 | 6 | 38 | 5 | 24 | 5 | 40 | 5 | 10 | 3 | 88 | 3 | 44 | 3 | 62 | 2 | 45 | 2 | 3 | 2 |
| 7 | 16 | 62 | 4700 | 250 | 40 | 2530 | 0 | 0 | 0 | 1440 | 460 | 340 | 130 | 68 | 4 | 38 | 3 | 40 | 2 | 26 | 1 | 31 | 1 | 36 | 1 | 79 | 1 | | | | | | |
| 8 | 6 | 62 | 3200 | 250 | 0 | 660 | 0 | 330 | 0 | 1530 | 460 | 750 | 0 | 71 | 3 | 68 | 3 | 38 | 1 | 51 | 1 | 88 | 1 | 3 | 1 | 30 | 1 | | | | | | |
| 8 | 20 | 62 | 1900 | 0 | 0 | 610 | 0 | 0 | 0 | 970 | 340 | 840 | 130 | 68 | 3 | 88 | 1 | 40 | 1 | 44 | 1 | | | | | | | | | | | | |
| 9 | 4 | 62 | 3100 | 170 | 0 | 760 | 0 | 130 | 0 | 1730 | 340 | 1010 | 380 | 68 | 4 | 38 | 2 | 26 | 1 | 71 | 1 | | | | | | | | | | | | |
| 9 | 17 | 62 | 1100 | 170 | 0 | 350 | 0 | 80 | 0 | 290 | 170 | 290 | 40 | 38 | 1 | 3 | 1 | 68 | 1 | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS NUMBER PER LITER | ROTIFERS GENERA AND COUNT LEVEL (See text for Codes) 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | CRUSTACEA NUMBER PER LITER | CRUSTACEA GENERA AND COUNT LEVEL (See text for Codes) 1ST | | 2ND | | 3RD | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 23 | 52 | 27 | 33 | 26 | 4 | 16 | 3 | 8 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 17 | 61 | 23 | 48 | 27 | 19 | 82 | 13 | 26 | 7 | 13 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 82 | 18 | 23 | 18 | 27 | 12 | 26 | 7 | 45 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 26 | 13 | 23 | 11 | 27 | 7 | 82 | 7 | 62 | 20 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 36 | 16 | 64 | 8 | 26 | 7 | 65 | 7 | 62 | 110 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 36 | 60 | 62 | 13 | 92 | 4 | 32 | 3 | 20 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 64 | 15 | 36 | 10 | 71 | 8 | 16 | 5 | 62 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 36 | 19 | 92 | 14 | 16 | 13 | 62 | 8 | 46 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 36 | 18 | 92 | 9 | 70 | 9 | 64 | 9 | 55 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 92 | 29 | 36 | 27 | 93 | 17 | 71 | 5 | 22 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 16 | 17 | 36 | 10 | 62 | 8 | 64 | 6 | 59 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 92 | 19 | 36 | 18 | 71 | 11 | 62 | 11 | 41 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 4 |
| 4 | 2 | 62 | 92 | 10 | 16 | 7 | 36 | 6 | 93 | 5 | 72 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 92 | 11 | 62 | 10 | 64 | 9 | 36 | 9 | 61 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 5 | 7 | 62 | 92 | 23 | 16 | 7 | 65 | 5 | 26 | 4 | 61 | 20 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 82 | 88 | 28 | 5 | 31 | 2 | 27 | 1 | 4 | 40 | 0 | 44 | 2 | 3 | 15 | 2 | 6 | 1 | | | | | 0 | | | | | | | 0 | 2 |
| 6 | 4 | 62 | 26 | 26 | 27 | 23 | 82 | 15 | 23 | 8 | 28 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 26 | 50 | 27 | 11 | 82 | 5 | 16 | 4 | 30 | 64620 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 26 | 37 | 28 | 30 | 27 | 15 | 70 | 10 | 8 | 0 | 0 | 6 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 27 | 44 | 26 | 25 | 16 | 4 | 92 | 4 | 23 | 0 | 0 | 16 | 15 | 2 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 82 | 54 | 23 | 27 | 27 | 9 | 26 | 6 | 4 | 0 | 0 | 18 | 20 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 23 | 44 | 27 | 24 | 26 | 22 | 82 | 4 | 6 | 0 | 0 | 9 | 15 | 1 | | | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 9 | 4 | 62 | 27 | 60 | 26 | 11 | 16 | 5 | 82 | 2 | 22 | 0 | 0 | 58 | 18 | 3 | 22 | 2 | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 9 | 17 | 62 | 23 | 26 | 27 | 16 | 26 | 13 | 15 | 13 | 32 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** NORTH ATLANTIC

**MINOR BASIN** POTOMAC RIVER

**STATION LOCATION** POTOMAC RIVER AT
GREAT FALLS, MARYLAND 40

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 20.6 | 8.0 | 8.3 | 1.6 | 17 | 3.0 | 5.0 | .0 | 14 | 104 | 140 | 7 | 8 | 36 | .2 | 198 | - |
| 10 | 9 | 61 | 18.9 | 8.2 | 8.2 | .4 | 16 | 1.6 | 4.3 | .0 | 11 | 109 | 140 | 10 | 9 | 35 | .2 | 192 | 110 |
| 10 | 17 | 61 | 15.0 | 9.2 | 8.4 | .8 | 19 | 2.7 | 4.9 | .0 | 16 | 103 | 142 | 7 | 14 | 40 | .1 | 219 | - |
| 10 | 23 | 61 | 15.0 | 8.4 | 8.1 | 1.4 | 13 | 1.9 | 5.5 | .0 | 15 | 94 | 138 | 6 | 18 | 38 | .1 | 258 | 500 |
| 10 | 30 | 61 | 15.0 | 9.6 | 8.2 | 2.5 | 15 | 1.6 | 5.8 | .0 | 15 | 105 | 144 | 10 | 20 | 34 | .1 | 216 | 400 |
| 11 | 6 | 61 | 20.0 | 7.6 | 8.2 | 1.0 | 13 | 1.9 | 3.5 | .0 | 15 | 105 | 140 | 11 | 10 | 40 | .1 | 243 | 170 |
| 11 | 13 | 61 | 11.0 | 9.4 | 8.1 | 1.4 | 15 | 2.1 | 6.0 | .0 | 11 | 95 | 126 | 12 | 10 | 30 | .1 | 170 | 71 |
| 11 | 20 | 61 | 4.5 | 10.2 | 8.4 | 1.2 | 15 | 1.6 | 4.0 | .0 | 20 | 98 | 132 | 6 | 8 | 33 | .2 | 195 | *20 |
| 11 | 27 | 61 | 9.4 | 9.6 | 8.3 | .8 | 17 | 2.0 | 4.6 | .1 | 10 | 85 | 116 | 9 | 20 | 27 | .1 | 155 | 520 |
| 12 | 4 | 61 | 7.2 | 12.0 | 8.6 | 2.0 | 14 | 1.4 | 3.7 | .1 | 16 | 94 | 132 | 7 | 10 | 34 | .1 | 160 | - |
| 12 | 11 | 61 | 2.2 | 12.8 | 8.6 | 2.0 | 17 | 1.5 | 3.5 | .1 | 13 | 89 | 134 | 8 | 10 | 38 | .2 | 174 | 140 |
| 12 | 18 | 61 | 1.1 | 12.4 | 8.1 | 2.4 | 19 | 1.8 | 5.0 | .1 | 13 | 65 | 102 | 12 | 35 | 33 | .1 | 143 | - |
| 12 | 27 | 61 | 2.2 | 11.8 | 8.0 | .5 | 14 | 2.0 | 3.6 | .1 | 10 | 48 | 80 | 7 | 25 | 26 | .1 | 100 | - |
| 1 | 2 | 62 | 1.1 | 12.2 | 7.9 | 1.8 | - | - | - | - | 8 | 61 | 96 | 6 | 12 | 27 | .1 | 113 | - |
| 1 | 8 | 62 | 2.2 | 11.0 | 7.6 | 6.4 | 35 | 1.7 | 8.7 | .2 | 8 | 44 | 56 | 22 | 180 | 26 | .0 | 114 | 19000 |
| 1 | 15 | 62 | 1.1 | 13.4 | 7.8 | 2.8 | 20 | 2.2 | 4.8 | .1 | 6 | 43 | 72 | 8 | 23 | 27 | .1 | 132 | - |
| 1 | 22 | 62 | 2.2 | 12.0 | 7.8 | 2.2 | 17 | 2.4 | 4.8 | .2 | 7 | 60 | 92 | 7 | 17 | 28 | .1 | 135 | 950 |
| 1 | 29 | 62 | 1.1 | 10.8 | 7.9 | 1.0 | 16 | 1.4 | 2.8 | .1 | 16 | 57 | 88 | 4 | 15 | 26 | 1.2 | 144 | 60 |
| 2 | 5 | 62 | 2.8 | 12.0 | 8.0 | 1.8 | 11 | 1.1 | 2.2 | .1 | 12 | 55 | 96 | 5 | 13 | 27 | .2 | 148 | - |
| 2 | 12 | 62 | .6 | 11.4 | 8.1 | 3.6 | 14 | .8 | 2.5 | .1 | 11 | 60 | 98 | 5 | 12 | 28 | .2 | 151 | *20 |
| 2 | 19 | 62 | 3.3 | 12.8 | 8.1 | 2.8 | 16 | 1.6 | 4.4 | .1 | 9 | 53 | 82 | 5 | 15 | 26 | .4 | 128 | 20 |
| 2 | 26 | 62 | 2.2 | 10.2 | 7.6 | 5.6 | 44 | 2.2 | 6.1 | .2 | 15 | 37 | 62 | 14 | 280 | 27 | .2 | 116 | 10000 |
| 3 | 5 | 62 | 3.3 | 12.2 | 7.7 | 4.0 | 16 | 2.1 | 5.3 | .1 | 6 | 36 | 68 | 8 | 32 | 23 | .1 | 122 | 4800 |
| 3 | 12 | 62 | 4.4 | 11.6 | 7.7 | 2.8 | - | - | - | - | 10 | 36 | 64 | - | 105 | 23 | .1 | 110 | - |
| 3 | 19 | 62 | 5.5 | 11.8 | 7.8 | 2.6 | 17 | 1.0 | 6.5 | .1 | 8 | 39 | 68 | 7 | 40 | 24 | .1 | 103 | - |
| 3 | 26 | 62 | 7.7 | 10.1 | 7.6 | 1.0 | 21 | 1.5 | 3.5 | .1 | 8 | 35 | 56 | 9 | 65 | 23 | .1 | 84 | 6000 |
| 4 | 2 | 62 | 11.7 | 11.6 | 7.8 | 4.4 | 19 | - | - | .1 | 4 | 43 | 74 | 10 | 40 | 24 | .1 | 105 | - |
| 4 | 9 | 62 | 12.2 | 9.2 | 7.5 | .4 | 36 | 2.6 | 8.0 | .1 | 7 | 42 | 74 | 20 | 200 | 26 | 1.2 | 108 | 15000 |
| 4 | 16 | 62 | 8.3 | 11.0 | 7.8 | 2.0 | 17 | 3.0 | 4.9 | .1 | 8 | 42 | 60 | 10 | 40 | 26 | .2 | 100 | 2500 |
| 4 | 23 | 62 | 12.9 | 9.2 | 7.6 | 1.0 | 17 | 1.5 | 3.3 | .1 | 5 | 49 | 80 | 5 | 15 | 25 | .2 | 120 | 750 |
| 4 | 30 | 62 | 22.2 | 7.6 | 8.3 | 1.4 | 20 | 2.0 | 3.7 | .0 | 5 | 61 | 96 | 10 | 12 | 26 | .2 | 126 | 50 |
| 5 | 7 | 62 | 20.0 | 7.8 | 7.8 | - | 16 | 1.9 | 5.5 | .1 | 5 | 52 | 76 | 8 | 20 | 25 | .1 | 117 | 2200 |
| 5 | 14 | 62 | 17.7 | 11.0 | 8.7 | 1.2 | 17 | 1.6 | 4.5 | .1 | 7 | 67 | 94 | 7 | 11 | 25 | .1 | 146 | - |
| 5 | 21 | 62 | 26.5 | 8.2 | 8.7 | 1.5 | 15 | 2.4 | 5.8 | .0 | 14 | 65 | 100 | 5 | 11 | 27 | .1 | 148 | - |
| 5 | 28 | 62 | 24.5 | 5.6 | 7.9 | 2.2 | 20 | 1.8 | 7.0 | .1 | 7 | 64 | 100 | 9 | 66 | 28 | .1 | 108 | 9500 |
| 6 | 4 | 62 | 25.0 | 6.8 | 8.0 | .2 | 15 | 1.6 | 3.1 | .1 | 7 | 71 | 100 | 7 | 23 | 27 | .2 | 140 | - |
| 6 | 11 | 62 | 27.1 | 6.4 | 8.8 | 2.0 | 16 | 1.3 | 6.2 | .1 | 6 | 76 | 108 | 3 | 18 | 28 | .1 | 172 | - |
| 6 | 18 | 62 | 27.2 | 6.2 | 7.9 | 1.0 | 14 | .5 | 5.2 | .1 | 6 | 62 | 112 | 7 | 23 | 30 | .1 | 150 | 200 |
| 6 | 25 | 62 | 27.2 | 6.6 | 8.7 | 1.8 | 14 | 2.7 | 5.6 | .1 | 6 | 77 | 120 | 5 | 17 | 27 | .1 | 151 | 1700 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 2 | 62 | 27.2 | 6.6 | 9.0 | 2.0 | 14 | 2.1 | 2.9 | - | 9 | 69 | 114 | - | 15 | 31 | .2 | 172 | 300 |
| 7 | 9 | 62 | 24.4 | 6.0 | 8.6 | - | 12 | 2.4 | 4.7 | .1 | 9 | 83 | 128 | 6 | 18 | 38 | .1 | 184 | 100 |
| 7 | 16 | 62 | 21.0 | - | 8.4 | - | 12 | 1.4 | 4.2 | .1 | 11 | 77 | 126 | 5 | 14 | 38 | .1 | 170 | 300 |
| 7 | 23 | 62 | 21.0 | 5.8 | 8.5 | 2.4 | 18 | 1.9 | 2.5 | .1 | 8 | 76 | 134 | 5 | 14 | 38 | .1 | 172 | *50 |
| 7 | 30 | 62 | 21.0 | 5.4 | 8.1 | 1.6 | 17 | 1.3 | 3.1 | .2 | 13 | 69 | 114 | 6 | 14 | 37 | .2 | 146 | *50 |
| 8 | 6 | 62 | 28.3 | 5.8 | 8.1 | 2.6 | 15 | 2.1 | 4.8 | .1 | 8 | 76 | 110 | 4 | 9 | 55 | .2 | 153 | *50 |
| 8 | 13 | 62 | 28.8 | 7.2 | 8.3 | 1.8 | 17 | 2.1 | 5.6 | .1 | 14 | 92 | 124 | 4 | 10 | 40 | .1 | 202 | *50 |
| 8 | 20 | 62 | 27.2 | 6.2 | 8.1 | 2.2 | 14 | 2.5 | 5.7 | .2 | 14 | 86 | 128 | 4 | 15 | 40 | .1 | 193 | 200 |
| 8 | 27 | 62 | 25.6 | 5.2 | 8.2 | .9 | 15 | 1.7 | 5.1 | .2 | 14 | 95 | 132 | 3 | 8 | 43 | .1 | 206 | 700 |
| 9 | 3 | 62 | 25.6 | 5.0 | 8.0 | 3.3 | - | - | - | - | - | 91 | 130 | 4 | 8 | 43 | .1 | 213 | - |
| 9 | 10 | 62 | 22.8 | 6.6 | 8.4 | 2.4 | 19 | 2.0 | 6.6 | .1 | 16 | 92 | 114 | 4 | 17 | 41 | .1 | 191 | 400 |
| 9 | 17 | 62 | 23.3 | 6.0 | 8.0 | 1.2 | 17 | 2.4 | 4.8 | .1 | 15 | 91 | 124 | 4 | 14 | 65 | .1 | 220 | *50 |
| 9 | 24 | 62 | 18.3 | 7.0 | 8.2 | 1.2 | 18 | 1.4 | 4.0 | .1 | 18 | 93 | 130 | 5 | 15 | 51 | .1 | 227 | *50 |

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Washington, D.C.
Operated by U.S. Geological Survey

MINOR BASIN Potomac River

STATION LOCATION Potomac River at
Great Falls, Maryland

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.690 | 2.430 | 3.870 | 5.600 | 6.180 | 78.900 | 22.000 | 9.730 | 8.000 | 3.370 | 2.190 | 1.120 |
| 2 | 1.540 | 2.310 | 3.590 | 5.500 | 5.940 | 64.100 | 22.500 | 11.300 | 7.200 | 2.970 | 1.960 | 1.160 |
| 3 | 1.440 | 2.270 | 3.280 | 5.400 | 6.000 | 43.100 | 23.700 | 13.100 | 6.900 | 2.800 | 1.810 | 1.260 |
| 4 | 1.440 | 2.310 | 3.060 | 5.020 | 5.580 | 32.300 | 22.400 | 21.400 | 6.600 | 2.970 | 1.730 | 1.220 |
| 5 | 1.500 | 2.310 | 3.060 | 5.020 | 5.400 | 24.300 | 19.500 | 20.700 | 5.880 | 3.100 | 1.770 | 1.330 |
| 6 | 1.580 | 2.190 | 2.760 | 6.000 | 5.400 | 21.600 | 17.400 | 16.200 | 7.200 | 2.970 | 1.810 | 1.500 |
| 7 | 1.580 | 2.470 | 2.720 | 12.900 | 5.290 | 19.900 | 16.600 | 13.200 | 7.500 | 2.970 | 1.730 | 1.610 |
| 8 | 1.580 | 3.150 | 2.470 | 22.900 | 6.120 | 17.800 | 21.900 | 11.600 | 6.780 | 3.690 | 1.580 | 1.880 |
| 9 | 1.580 | 3.280 | 2.470 | 33.800 | 6.900 | 16.400 | 37.700 | 10.600 | 7.620 | 4.060 | 1.690 | 1.960 |
| 10 | 1.540 | 2.930 | 2.760 | 28.900 | 6.600 | 15.400 | 35.500 | 9.800 | 6.840 | 3.410 | 1.880 | 1.960 |
| 11 | 1.540 | 3.280 | 2.630 | 19.200 | 5.880 | 15.300 | 30.600 | 9.240 | 5.580 | 2.970 | 2.040 | 1.770 |
| 12 | 1.650 | 3.970 | 3.410 | 13.400 | 5.460 | 27.800 | 27.400 | 9.100 | 5.020 | 2.840 | 2.150 | 1.650 |
| 13 | 1.690 | 3.640 | 4.010 | 10.200 | 5.070 | 49.500 | 35.100 | 8.710 | 4.960 | 2.890 | 2.150 | 1.540 |
| 14 | 1.610 | 3.320 | 4.250 | 8.710 | 5.180 | 78.400 | 50.700 | 8.190 | 5.120 | 2.630 | 2.190 | 1.400 |
| 15 | 1.730 | 3.150 | 9.300 | 7.930 | 4.800 | 82.400 | 48.500 | 7.860 | 9.990 | 2.680 | 2.150 | 1.440 |
| 16 | 1.580 | 3.010 | 11.600 | 8.520 | 5.070 | 66.600 | 39.200 | 7.860 | 13.200 | 2.720 | 1.960 | 1.360 |
| 17 | 1.540 | 2.890 | 9.240 | 9.380 | 5.700 | 55.300 | 31.300 | 8.000 | 10.500 | 2.760 | 1.880 | 1.330 |
| 18 | 1.540 | 2.760 | 10.000 | 9.100 | 6.300 | 47.100 | 26.100 | 7.800 | 8.120 | 2.800 | 1.730 | 1.260 |
| 19 | 1.580 | 2.760 | 10.100 | 9.310 | 6.720 | 42.300 | 22.800 | 7.380 | 6.840 | 2.720 | 1.650 | 1.260 |
| 20 | 1.500 | 2.840 | 15.000 | 8.380 | 6.900 | 40.000 | 20.400 | 7.860 | 6.840 | 3.150 | 1.610 | 1.220 |
| 21 | 1.810 | 2.760 | 24.800 | 7.260 | 7.560 | 41.000 | 19.300 | 7.440 | 7.620 | 3.590 | 1.470 | 1.220 |
| 22 | 1.960 | 2.630 | 19.200 | 6.600 | 8.450 | 67.300 | 18.100 | 6.660 | 6.000 | 3.460 | 1.440 | 1.190 |
| 23 | 2.350 | 2.720 | 14.700 | 6.420 | 9.450 | 114.000 | 16.800 | 6.840 | 5.940 | 3.190 | 1.610 | 1.190 |
| 24 | 10.200 | 3.230 | 12.000 | 6.540 | 12.500 | 99.500 | 15.100 | 8.190 | 5.760 | 3.100 | 1.690 | 1.190 |
| 25 | 7.200 | 3.280 | 10.200 | 6.660 | 28.100 | 64.600 | 13.900 | 7.620 | 5.760 | 2.930 | 1.540 | 1.260 |
| 26 | 6.240 | 3.460 | 8.580 | 7.680 | 43.000 | 49.300 | 13.200 | 6.960 | 5.180 | 2.680 | 1.500 | 1.220 |
| 27 | 4.700 | 3.230 | 7.500 | 8.580 | 51.100 | 40.900 | 12.400 | 10.100 | 4.450 | 2.430 | 1.400 | 1.360 |
| 28 | 3.920 | 3.320 | 7.020 | 8.000 | 65.200 | 33.400 | 11.500 | 9.240 | 4.350 | 2.150 | 1.300 | 1.400 |
| 29 | 3.410 | 4.160 | 6.540 | 7.260 |  | 28.500 | 10.800 | 8.450 | 3.690 | 2.040 | 1.190 | 1.400 |
| 30 | 3.150 | 4.250 | 6.060 | 7.200 |  | 24.500 | 10.200 | 7.740 | 3.370 | 2.040 | 1.120 | 1.400 |
| 31 | 2.800 |  | 5.800 | 6.720 |  | 21.500 |  | 7.740 |  | 2.150 | 1.050 |  |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 10 | 2 | 61 | 10 | 11 | 5804 | 153 | 68 | 85 | 2 | 16 | 20 | 1 | 1 | 17 | 1 | 8 | 8 | 2 | 12 |
| 11 | 6 | 61 | 11 | 14 | 5240 | 133 | 35 | 98 | 1 | 9 | 14 | 1 | 1 | 11 | 1 | 4 | 1 | 1 | 5 |
| 1 | 1 | 62 | 1 | 9 | 4436 | 163 | 42 | 121 | 2 | 11 | 13 | 1 | 1 | 10 | 1 | 4 | 2 | 0 | 10 |
| 2 | 5 | 62 | 2 | 13 | 3599 | 197 | 73 | 124 | 5 | 18 | 20 | 2 | 2 | 15 | 1 | 8 | 6 | 2 | 14 |
| 3 | 5 | 62 | 3 | 14 | 3190 | 225 | 67 | 158 | 5 | 16 | 15 | 2 | 1 | 10 | 2 | 8 | 5 | 1 | 17 |
| 4 | 2 | 62 | 4 | 9 | 4682 | 170 | 55 | 115 | 4 | 14 | 12 | 2 | 1 | 8 | 1 | 6 | 4 | 1 | 14 |
| 4 | 30 | 62 | 5 | 7 | 4610 | 188 | 90 | 98 | 3 | 24 | 20 | 2 | 1 | 16 | 1 | 8 | 9 | 2 | 24 |
| 6 | 4 | 62 | 6 | 12 | 5132 | 141 | 69 | 72 | 4 | 19 | 16 | 1 | 1 | 12 | 2 | 8 | 7 | 1 | 14 |
| 7 | 6 | 62 | 7 | 14 | 5034 | 165 | 70 | 95 | 1 | 15 | 26 | 1 | 1 | 22 | 2 | 8 | 6 | 1 | 13 |
| 8 | 6 | 62 | 8 | 14 | 5072 | 176 | 78 | 98 | 2 | 22 | 23 | 1 | 1 | 20 | 1 | 9 | 8 | 2 | 12 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** MARYLAND

**MAJOR BASIN** NORTH ATLANTIC

**MINOR BASIN** POTOMAC RIVER

**STATION LOCATION** POTOMAC RIVER AT
WILLIAMSPORT, MARYLAND 41

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 14 | - | - | - | - | - | - | 5 | 4 | 6 | 7 | 11 | 8 | | | | | | |
| 10 | 9 | 61 | 10 | 30 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 4 | 23 | 6 | 27 | 7 | | | | | | |
| 10 | 16 | 61 | 10 | 25 | - | - | - | - | - | - | 1 | 5 | 10 | 7 | 11 | 9 | | | | | | |
| 10 | 23 | 61 | 11 | 2 | - | - | - | - | - | - | 2 | 5 | 21 | 8 | 23 | 9 | | | | | | |
| 11 | 6 | 61 | 11 | 21 | - | - | - | - | - | - | 4 | 5 | 6 | 7 | 10 | 9 | | | | | | |
| 11 | 13 | 61 | 11 | 28 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 5 | 14 | 7 | 15 | 9 | | | | | | |
| 11 | 20 | 61 | 12 | 1 | - | - | - | - | - | - | 16 | 6 | 31 | 7 | 47 | 9 | | | | | | |
| 11 | 27 | 61 | 12 | 7 | - | - | - | - | - | - | 65 | 7 | 76 | 8 | 141 | 11 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 9 | 4 | 22 | 5 | 31 | 6 | | | | | | |
| 12 | 11 | 61 | 12 | 19 | - | - | - | - | - | - | 11 | 6 | 13 | 7 | 24 | 9 | | | | | | |
| 12 | 18 | 61 | 1 | 4 | 0 | 1 | 0 | 1 | 0 | 1 | 21 | 6 | 15 | 6 | 36 | 8 | | | | | | |
| 1 | 2 | 62 | 1 | 12 | - | - | - | - | - | - | 13 | 6 | 13 | 6 | 26 | 8 | | | | | | |
| 1 | 8 | 62 | 1 | 19 | 1 | 1 | 0 | 1 | 1 | 1 | 32 | 6 | 17 | 7 | 49 | 9 | | | | | | |
| 1 | 15 | 62 | 1 | 29 | - | - | - | - | - | - | 28 | 6 | 20 | 6 | 48 | 8 | | | | | | |
| 1 | 22 | 62 | 2 | 1 | - | - | - | - | - | - | 18 | 5 | 13 | 6 | 31 | 7 | | | | | | |
| 1 | 29 | 62 | 2 | 8 | - | - | - | - | - | - | 11 | 4 | 8 | 4 | 19 | 6 | | | | | | |
| 2 | 5 | 62 | 2 | 14 | - | - | - | - | - | - | 16 | 5 | 9 | 6 | 25 | 8 | | | | | | |
| 2 | 12 | 62 | 2 | 21 | 0 | 1 | 0 | 1 | 0 | 1 | 17 | 4 | 51 | 5 | 68 | 6 | | | | | | |
| 2 | 19 | 62 | 3 | 2 | - | - | - | - | - | - | 60 | 7 | 25 | 7 | 85 | 10 | | | | | | |
| 2 | 26 | 62 | 3 | 12 | - | - | - | - | - | - | 65 | 10 | 19 | 6 | 84 | 12 | | | | | | |
| 3 | 5 | 62 | 3 | 16 | - | - | - | - | - | - | 0 | 5 | 6 | 6 | 6 | 8 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | 0 | 1 | 1 | 1 | 1 | 1 | 21 | 4 | 13 | 5 | 34 | 6 | | | | | | |
| 3 | 19 | 62 | 3 | 30 | - | - | - | - | - | - | 3 | 3 | 1 | 4 | 4 | 5 | | | | | | |
| 3 | 26 | 62 | 4 | 5 | - | - | - | - | - | - | 4 | 5 | 5 | 5 | 9 | 7 | | | | | | |
| 4 | 2 | 62 | 4 | 13 | - | - | - | - | - | - | 12 | 6 | 13 | 6 | 25 | 8 | | | | | | |
| 4 | 9 | 62 | 4 | 24 | 0 | 1 | 0 | 1 | 0 | 1 | 13 | 5 | 13 | 5 | 26 | 7 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 12 | 6 | 16 | 6 | 28 | 8 | | | | | | |
| 4 | 23 | 62 | 9 | 18 | - | - | - | - | - | - | 2 | 4 | 5 | 5 | 7 | 6 | | | | | | |
| 4 | 30 | 62 | 6 | 25 | - | - | - | - | - | - | 0 | 4 | 19 | 6 | 19 | 7 | | | | | | |
| 5 | 14 | 62 | 6 | 21 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 10 | 10 | 6 | 10 | 12 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | - | - | - | - | - | - | 2 | 5 | 5 | 6 | 7 | 8 | | | | | | |
| 5 | 28 | 62 | 6 | 29 | - | - | - | - | - | - | 8 | 5 | 31 | 7 | 39 | 9 | | | | | | |
| 6 | 11 | 62 | 6 | 11 | 0 | 1 | 0 | 0 | 0 | 1 | 4 | 5 | 11 | 6 | 15 | 7 | | | | | | |
| 6 | 18 | 62 | 7 | 10 | - | - | - | - | - | - | 6 | 5 | 15 | 7 | 21 | 9 | | | | | | |
| 6 | 25 | 62 | 7 | 26 | - | - | - | - | - | - | 14 | 6 | 2 | 8 | 16 | 10 | | | | | | |
| 7 | 23 | 62 | 8 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 14 | 14 | 7 | 14 | 16 | | | | | | |
| 7 | 30 | 62 | 8 | 21 | - | - | - | - | - | - | 0 | 5 | 12 | 7 | 12 | 8 | | | | | | |
| 8 | 6 | 62 | 8 | 27 | - | - | - | - | - | - | 0 | 2 | 8 | 3 | 8 | 4 | | | | | | |
| 8 | 13 | 62 | 8 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 14 | 7 | 14 | 9 | | | | | | |
| 8 | 20 | 62 | 9 | 5 | - | - | - | - | - | - | 0 | 5 | 13 | 8 | 13 | 9 | | | | | | |
| 8 | 27 | 62 | 9 | 26 | - | - | - | - | - | - | 4 | 7 | 7 | 10 | 11 | 12 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 9 | 4 | 62 | 10 | 1 | - | - | - | - | - | - | 6 | 5 | 19 | 8 | 25 | 9 | | | | | | | |
| 9 | 10 | 62 | 10 | 12 | - | - | - | - | - | - | 3 | 5 | 23 | 8 | 26 | 9 | | | | | | | |
| 9 | 17 | 62 | 10 | 13 | - | - | - | - | - | - | 5 | 5 | 18 | 8 | 23 | 9 | | | | | | | |
| 9 | 24 | 62 | 10 | 19 | - | - | - | - | - | - | 12 | 6 | 12 | 9 | 24 | 11 | | | | | | | |

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10T |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS |
| 10 | 2 | 61 | 100 | 40 | 0 | 0 | 0 | 0 | 0 | 40 | 60 | 20 | 40 | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 200 | 0 | 0 | 0 | 0 | 20 | 0 | 80 | 60 | 0 | 40 | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 210 | 20 | 0 | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 200 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 120 | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 300 | 0 | 0 | 0 | 0 | 80 | 0 | 80 | 150 | 0 | 80 | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 500 | 0 | 20 | 0 | 0 | 40 | 0 | 20 | 410 | 0 | 150 | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 160 | 0 | 50 | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 200 | 0 | 0 | 20 | 0 | 20 | 0 | 20 | 140 | 0 | 90 | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 120 | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 140 | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 500 | 0 | 0 | 20 | 0 | 60 | 0 | 0 | 460 | 0 | 100 | 82 | 1 | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 180 | 0 | 50 | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 370 | 0 | 20 | | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 1100 | 0 | 0 | 70 | 0 | 0 | 50 | 430 | 560 | 70 | 290 | 68 | 1 | 92 | 1 | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 900 | 0 | 0 | 20 | 0 | 0 | 0 | 20 | 830 | 20 | 80 | 81 | 1 | 92 | 1 | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 7900 | 0 | 130 | 550 | 0 | 0 | 0 | 4900 | 2360 | 130 | 590 | 68 | 5 | 92 | 4 | 71 | 1 | 88 | 1 | | | | | | | | | | | |
| 6 | 4 | 62 | 3000 | 0 | 110 | 170 | 0 | 20 | 0 | 1940 | 720 | 250 | 720 | 68 | 4 | | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 1400 | 20 | 130 | 190 | 0 | 0 | 0 | 490 | 530 | 190 | 300 | 68 | 2 | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 130 | 0 | 40 | | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 210 | 0 | 40 | | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 500 | 0 | 80 | 0 | 0 | 0 | 40 | 170 | 250 | 80 | 250 | | | | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 500 | 0 | 80 | 0 | 0 | 0 | 0 | 120 | 290 | 40 | 0 | | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 300 | 0 | 10 | 40 | 0 | 0 | 0 | 180 | 40 | 10 | 40 | | | | | | | | | | | | | | | | | | | |
| 9 | 24 | 62 | 200 | 0 | 10 | 30 | 0 | 80 | 0 | 20 | 70 | 10 | 70 | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 2 | 32 | 16 | 31 | 52 | 4 | 65 | 3 | 30 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 2 | 36 | 16 | 30 | 92 | 3 | 58 | 2 | 29 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 36 | 21 | 2 | 14 | 16 | 10 | 45 | 10 | 45 | 100 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 36 | 37 | 2 | 11 | 45 | 8 | 16 | 6 | 38 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 36 | 69 | 45 | 9 | 64 | 3 | 71 | 2 | 17 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 36 | 15 | 2 | 8 | 64 | 8 | 16 | 6 | 63 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 3 | 0 |
| 1 | 2 | 62 | 36 | 22 | 64 | 14 | 16 | 14 | 92 | 7 | 43 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 1 | 15 | 62 | 16 | 14 | 36 | 10 | 31 | 10 | 92 | 8 | 58 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 36 | 25 | 16 | 10 | 51 | 8 | 52 | 5 | 52 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 51 | 14 | 36 | 11 | 92 | 7 | 62 | 6 | 62 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 36 | 27 | 92 | 20 | 33 | 7 | 45 | 6 | 40 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 3 | 19 | 62 | 36 | 24 | 33 | 11 | 92 | 8 | 16 | 6 | 51 | 20 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 92 | 20 | 36 | 17 | 16 | 7 | 31 | 7 | 49 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 92 | 28 | 36 | 9 | 33 | 9 | 31 | 7 | 47 | 50 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 5 | 7 | 62 | 92 | 26 | 33 | 11 | 2 | 8 | 31 | 8 | 47 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 5 | 21 | 62 | 92 | 40 | 27 | 19 | 67 | 6 | 33 | 5 | 30 | 60 | 0 | 8 | 6 | 1 | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 6 | 4 | 62 | 2 | 14 | 92 | 14 | 16 | 9 | 26 | 8 | 55 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 92 | 28 | 16 | 16 | 33 | 10 | 62 | 8 | 38 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 16 | 40 | 2 | 5 | 92 | 4 | 70 | 3 | 48 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 16 | 30 | 2 | 10 | 64 | 9 | 26 | 8 | 43 | 0 | 0 | 16 | 15 | 2 | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 8 | 6 | 62 | 16 | 24 | 2 | 21 | 64 | 7 | 71 | 4 | 44 | 40 | 0 | 7 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 16 | 42 | 2 | 17 | 64 | 4 | 65 | 4 | 33 | 0 | 0 | 32 | 15 | 3 | | | | | | | | | 6 | 50 | 1 | 76 | 1 | | | 0 | 0 |
| 9 | 4 | 62 | 2 | 40 | 16 | 15 | 65 | 10 | 64 | 6 | 29 | 0 | 0 | 30 | 15 | 3 | | | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 9 | 24 | 62 | 2 | 29 | 16 | 14 | 92 | 11 | 36 | 8 | 38 | 0 | 0 | 32 | 11 | 2 | 17 | 1 | 15 | 1 | | | | | 6 | 50 | 1 | 76 | 1 | | | 0 | 0 |

STATION LOCATION POTOMAC RIVER AT
WILLIAMSPORT, MARYLAND 41

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 130 |
| 10 | 4 | 61 | 15.0 | 7.9 | 7.8 | 2.5 | - | - | - | - | - | 80 | 140 | 5 | 1 | - | - | - | - |
| 10 | 9 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 230 |
| 10 | 11 | 61 | 17.0 | - | 8.3 | - | - | - | - | - | - | 70 | 132 | 5 | 1 | - | - | - | - |
| 10 | 12 | 61 | - | - | - | - | 13 | - | - | - | - | - | - | - | - | - | - | - | - |
| 10 | 16 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 330 |
| 10 | 18 | 61 | 14.0 | 8.5 | 7.9 | .8 | - | - | - | - | - | 88 | 136 | 5 | 1 | - | - | - | - |
| 10 | 24 | 61 | 14.0 | - | 8.3 | - | - | - | - | - | - | 76 | 122 | 5 | 4 | - | - | - | - |
| 11 | 1 | 61 | 12.0 | 8.8 | 7.6 | 1.1 | - | - | - | - | - | 72 | 104 | 5 | 8 | - | - | 140 | - |
| 11 | 7 | 61 | 14.4 | - | 7.9 | - | - | - | - | - | - | 82 | 126 | 5 | 8 | - | - | - | - |
| 11 | 13 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 42 | .1 | - | 60 |
| 11 | 14 | 61 | - | - | - | - | 9 | - | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 15 | 61 | 9.0 | 10.0 | 7.7 | 2.6 | - | - | - | - | - | 82 | 106 | 5 | 10 | - | - | 96 | - |
| 11 | 20 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 39 | .0 | 172 | 46 |
| 11 | 21 | 61 | 7.2 | - | 7.9 | - | - | - | - | - | - | 78 | 114 | 5 | 8 | - | - | - | - |
| 11 | 27 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 220 |
| 11 | 28 | 61 | 5.6 | - | 7.9 | - | - | - | - | - | - | 84 | 138 | 5 | 8 | - | - | - | - |
| 12 | 4 | 61 | - | - | - | - | - | - | - | - | 11 | - | - | - | - | 42 | .0 | - | 80 |
| 12 | 6 | 61 | 4.0 | 11.6 | 7.7 | 1.5 | - | - | - | - | - | 72 | 96 | 20 | 10 | - | - | 80 | - |
| 12 | 11 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 47 |
| 12 | 12 | 61 | 3.3 | - | 7.9 | - | - | - | - | - | - | 70 | 108 | 5 | 10 | - | - | - | - |
| 12 | 18 | 61 | - | - | - | - | - | - | - | - | 6 | - | - | - | - | 28 | .1 | - | - |
| 1 | 2 | 62 | - | - | - | - | - | - | - | - | 8 | - | - | - | - | 33 | - | - | - |
| 1 | 8 | 62 | - | - | - | - | - | - | - | - | 10 | - | - | - | - | 32 | - | - | 660 |
| 1 | 9 | 62 | 3.3 | - | 7.2 | - | 21 | - | - | - | - | 34 | 86 | - | 140 | - | - | - | - |
| 1 | 15 | 62 | - | - | - | - | - | - | - | - | 5 | - | - | - | - | 28 | - | - | 200 |
| 1 | 17 | 62 | 1.1 | - | 7.3 | - | - | - | - | - | - | 44 | 80 | 5 | 12 | - | - | - | - |
| 1 | 22 | 62 | - | - | - | - | - | - | - | - | 6 | - | - | - | - | 34 | .1 | - | 200 |
| 1 | 23 | 62 | 1.1 | - | 7.3 | - | - | - | - | - | - | 46 | 76 | 5 | 12 | - | - | - | - |
| 1 | 29 | 62 | - | - | - | - | - | - | - | - | 6 | - | - | - | - | 29 | .0 | 97 | 110 |
| 1 | 30 | 62 | 1.7 | - | 7.3 | - | - | - | - | - | - | 40 | 72 | 5 | 8 | - | - | - | - |
| 2 | 5 | 62 | - | - | - | - | - | - | - | - | 6 | - | - | - | - | 38 | - | - | 7 |
| 2 | 13 | 62 | - | - | - | - | 13 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 14 | 62 | 1.1 | - | 7.4 | - | - | - | - | - | - | 36 | 70 | 5 | 12 | - | - | - | - |
| 2 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 60 |
| 2 | 22 | 62 | 1.7 | - | 7.4 | - | - | - | - | - | - | 42 | 72 | 5 | 15 | - | - | - | - |
| 2 | 27 | 62 | 3.9 | - | 7.1 | - | - | - | - | - | - | 28 | 48 | 20 | 140 | - | - | - | - |
| 3 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 330 |
| 3 | 6 | 62 | 1.7 | - | 7.3 | - | - | - | - | - | - | 30 | 58 | 5 | 6 | - | - | - | - |

NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** MARYLAND

**MAJOR BASIN** NORTH ATLANTIC

**MINOR BASIN** POTOMAC RIVER

**STATION LOCATION** POTOMAC RIVER AT WILLIAMSPORT, MARYLAND 41

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 3 | 12 | 62 | - | - | - | - | 9 | - | - | - | - | - | - | - | - | - | - | - | 85 |
| 3 | 13 | 62 | 3.9 | - | 7.2 | - | - | - | - | - | - | 50 | 26 | 20 | 160 | - | - | - | - |
| 3 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 480 |
| 3 | 21 | 62 | 5.6 | - | 7.2 | - | - | - | - | - | - | 28 | 50 | 10 | 30 | - | - | - | - |
| 3 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1500 |
| 4 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 170 |
| 4 | 4 | 62 | 9.0 | 11.4 | 7.2 | .6 | - | - | - | - | - | 40 | 58 | 30 | 12 | - | - | - | - |
| 4 | 9 | 62 | - | - | - | - | 10 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 10 | 62 | 10.6 | - | 7.2 | - | - | - | - | - | - | 26 | 60 | 15 | 25 | - | - | - | - |
| 4 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 240 |
| 4 | 17 | 62 | 7.8 | - | 7.3 | - | - | - | - | - | - | 34 | 58 | 5 | 12 | - | - | - | - |
| 4 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 4 | 24 | 62 | 12.8 | - | 7.4 | - | - | - | - | - | - | 38 | 70 | 20 | 8 | - | - | - | - |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 86 |
| 5 | 2 | 62 | 20.0 | - | 7.4 | - | - | - | - | - | - | 50 | 82 | 10 | 10 | - | - | - | - |
| 5 | 7 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 340 |
| 5 | 8 | 62 | 17.8 | - | 7.3 | - | - | - | - | - | - | 38 | 76 | 15 | 8 | - | - | - | - |
| 5 | 14 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 220 |
| 5 | 15 | 62 | 17.2 | - | 7.5 | - | - | - | - | - | - | 50 | 84 | 5 | 12 | - | - | - | - |
| 5 | 21 | 62 | 20.0 | 9.0 | 7.8 | 1.0 | - | - | - | - | - | 54 | 78 | 10 | 10 | - | - | - | 230 |
| 5 | 22 | 62 | 23.3 | - | 7.7 | - | - | - | - | - | - | 52 | 86 | 5 | 8 | - | - | - | - |
| 6 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 570 |
| 6 | 6 | 62 | 23.0 | - | 7 - | - | - | - | - | - | - | 52 | 88 | 20 | 8 | - | - | - | - |
| 6 | 11 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 630 |
| 6 | 12 | 62 | 23.9 | - | 7.7 | - | - | - | - | - | - | 52 | 80 | 5 | 8 | - | - | - | - |
| 6 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 33 | - | - | 120 |
| 6 | 20 | 62 | 25.0 | 8.3 | 7.7 | 1.0 | - | - | - | - | - | 46 | 86 | 5 | 10 | - | - | - | - |
| 6 | 26 | 62 | 25.0 | - | 7.7 | - | - | - | - | - | - | 58 | 96 | 5 | 12 | - | - | - | - |
| 7 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 420 |
| 7 | 3 | 62 | 24.4 | - | 7.7 | - | - | - | - | - | - | 58 | 102 | 5 | 4 | - | - | - | - |
| 7 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 40 |
| 7 | 10 | 62 | 25.0 | - | 7.8 | - | - | - | - | - | - | 64 | 132 | 5 | 2 | - | - | - | - |
| 7 | 16 | 62 | - | - | - | - | 9 | - | - | - | - | - | - | - | - | - | - | - | 470 |
| 7 | 17 | 62 | 23.3 | - | 8.0 | - | - | - | - | - | - | 70 | 112 | 5 | 6 | - | - | - | - |
| 7 | 23 | 62 | - | - | - | - | - | - | - | - | 13 | - | - | - | - | 66 | - | - | 250 |
| 7 | 25 | 62 | 25.0 | - | 8.0 | 1.3 | - | - | - | - | - | 78 | 130 | 5 | 8 | - | - | 206 | - |
| 7 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 30 |
| 8 | 1 | 62 | 25.0 | 8.2 | 8.0 | 1.0 | - | - | - | - | - | 70 | 130 | 10 | 6 | - | - | 190 | - |
| 8 | 6 | 62 | - | - | - | - | - | - | - | - | 14 | - | - | - | - | 62 | .0 | - | 80 |

## NATIONAL WATER QUALITY NETWORK

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** MARYLAND
**MAJOR BASIN** NORTH ATLANTIC
**MINOR BASIN** POTOMAC RIVER
**STATION LOCATION** POTOMAC RIVER AT
WILLIAMSPORT, MARYLAND

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 8 | 7 | 62 | 25.6 | - | 8.0 | - | - | - | - | - | - | 72 | 138 | 5 | 8 | - | - | - | - |
| 8 | 13 | 62 | - | - | - | - | - | - | - | - | 18 | - | - | - | - | 60 | - | - | 100 |
| 8 | 14 | 62 | - | - | - | - | 9 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 15 | 62 | 22.0 | 8.7 | 7.9 | .8 | - | - | - | - | - | 72 | 138 | 10 | 3 | - | - | 188 | - |
| 8 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 350 |
| 8 | 22 | 62 | 23.9 | - | 8.3 | - | - | - | - | - | - | 76 | 145 | 5 | 4 | - | - | - | - |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 87 |
| 8 | 28 | 62 | 24.4 | - | 7.9 | - | - | - | - | - | - | 86 | 156 | 5 | 4 | - | - | - | - |
| 9 | 4 | 62 | 22.8 | - | 7.9 | - | - | - | - | - | - | 72 | 156 | 5 | 4 | - | - | - | - |
| 9 | 10 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 9 | 11 | 62 | 22.2 | - | 8.4 | - | - | - | - | - | - | 86 | 154 | 5 | 2 | - | - | - | - |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 530 |
| 9 | 19 | 62 | 19.0 | 7.0 | 7.7 | .6 | - | - | - | - | - | 70 | 142 | 5 | 2 | - | - | 262 | - |
| 9 | 24 | 62 | - | - | - | - | - | - | - | - | 11 | - | - | - | - | 60 | .0 | 215 | 100 |
| 9 | 25 | 62 | 18.3 | - | 8.2 | - | - | - | - | - | - | 82 | 144 | 5 | 4 | - | - | - | - |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Williamsport, Maryland
Operated by U.S. Geological Survey

MAJOR BASIN North Atlantic
MINOR BASIN Potomac River
STATION LOCATION Potomac River at Williamsport, Maryland

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .816 | 1.040 | 1.780 | 2.860 | 3.770 | 59.400 | 12.200 | 5.700 | 4.900 | 1.480 | 1.100 | .582 |
| 2 | .762 | 1.000 | 1.600 | 2.650 | 3.810 | 41.300 | 11.800 | 5.930 | 4.500 | 1.460 | .922 | .641 |
| 3 | .756 | 1.000 | 1.450 | 2.570 | 3.500 | 27.000 | 12.500 | 10.500 | 4.400 | 1.450 | .914 | .576 |
| 4 | .836 | .934 | 1.420 | 2.600 | 3.170 | 18.700 | 11.400 | 14.800 | 3.840 | 1.330 | .890 | .630 |
| 5 | .896 | .941 | 1.320 | 2.580 | 3.150 | 14.300 | 10.200 | 11.900 | 3.020 | 1.340 | .932 | .681 |
| 6 | .830 | 1.200 | 1.300 | 3.050 | 3.210 | 12.600 | 9.340 | 9.160 | 3.900 | 1.400 | .844 | .852 |
| 7 | .810 | 1.430 | 1.150 | 4.630 | 3.930 | 11.400 | 9.150 | 7.680 | 4.020 | 2.040 | .732 | 1.120 |
| 8 | .810 | 1.470 | 1.080 | 8.800 | 4.690 | 9.950 | 16.900 | 6.830 | 5.080 | 2.670 | .898 | 1.120 |
| 9 | .770 | 1.260 | 1.150 | 19.500 | 4.730 | 9.290 | 25.000 | 6.200 | 5.110 | 2.290 | .985 | 1.170 |
| 10 | .856 | 1.190 | 1.100 | 14.300 | 4.050 | 8.940 | 20.500 | 5.720 | 3.970 | 1.780 | 1.130 | 1.080 |
| 11 | .996 | 2.220 | 1.060 | 9.610 | 3.590 | 8.290 | 17.500 | 5.630 | 3.250 | 1.450 | 1.220 | 1.010 |
| 12 | .968 | 1.970 | 1.200 | 6.350 | 3.190 | 11.600 | 15.500 | 5.400 | 2.860 | 1.560 | 1.120 | .982 |
| 13 | .907 | 1.690 | 1.010 | 5.030 | 2.970 | 23.800 | 21.300 | 4.940 | 2.710 | 1.110 | 1.200 | .822 |
| 14 | .882 | 1.460 | 2.510 | 4.120 | 2.450 | 49.000 | 34.000 | 4.680 | 3.100 | 1.330 | 1.310 | .818 |
| 15 | .835 | 1.450 | 9.530 | 4.000 | 2.520 | 46.400 | 29.800 | 4.600 | 10.000 | 1.360 | 1.110 | .743 |
| 16 | .762 | 1.330 | 6.670 | 4.540 | 3.010 | 36.100 | 22.600 | 4.770 | 7.920 | 1.350 | 1.060 | .710 |
| 17 | .788 | 1.300 | 4.860 | 4.810 | 3.590 | 30.900 | 18.200 | 5.120 | 6.170 | 1.450 | .971 | .657 |
| 18 | .787 | 1.260 | 4.190 | 5.140 | 3.550 | 25.500 | 15.300 | 4.660 | 4.670 | 1.350 | .844 | .665 |
| 19 | .741 | 1.270 | 3.590 | 5.300 | 3.670 | 23.700 | 13.700 | 4.820 | 3.940 | 1.550 | .860 | .633 |
| 20 | .727 | 1.240 | 10.500 | 4.280 | 3.750 | 23.400 | 12.400 | 4.960 | 3.430 | 2.260 | .821 | .621 |
| 21 | .762 | 1.180 | 14.100 | 3.620 | 3.950 | 24.100 | 11.700 | 4.360 | 3.060 | 2.210 | .818 | .587 |
| 22 | .762 | 1.090 | 10.600 | 3.400 | 4.740 | 55.100 | 11.100 | 4.430 | 2.590 | 2.010 | 1.140 | .555 |
| 23 | .880 | 1.250 | 8.310 | 3.500 | 5.690 | 85.200 | 10.300 | 4.410 | 2.810 | 1.900 | 1.010 | .615 |
| 24 | 3.020 | 1.190 | 6.770 | 3.640 | 7.990 | 61.500 | 9.370 | 4.480 | 3.380 | 1.730 | .899 | .619 |
| 25 | 3.670 | 1.200 | 5.680 | 4.280 | 24.200 | 38.000 | 8.810 | 4.300 | 3.040 | 1.590 | .700 | .595 |
| 26 | 2.610 | 1.300 | 4.680 | 5.940 | 30.600 | 30.000 | 8.190 | 5.970 | 2.120 | 1.430 | .668 | .633 |
| 27 | 2.030 | 1.470 | 4.120 | 5.420 | 30.700 | 24.000 | 7.530 | 6.800 | 2.440 | 1.140 | .585 | .602 |
| 28 | 1.660 | 2.160 | 3.670 | 4.810 | 48.100 | 19.600 | 6.930 | 4.830 | 2.040 | 1.160 | .563 | .676 |
| 29 | 1.460 | 2.440 | 3.360 | 4.660 |  | 16.800 | 6.440 | 4.660 | 1.670 | 1.250 | .483 | .688 |
| 30 | 1.120 | 2.040 | 3.190 | 4.660 |  | 14.300 | 6.030 | 4.720 | 1.730 | 1.190 | .591 | .682 |
| 31 | .980 |  | 3.070 | 4.120 |  | 12.800 |  | 5.120 |  | 1.340 | .639 |  |

Computed as Potomac River at Point of Rocks, Maryland less Shenandoah River at Millville, West Virginia.

**Note: Data for water years 1959-1960 and 1960-1961 incorrectly reported as the sum of the two points. Corrected data will be furnished on request.**

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** MINNESOTA
**MAJOR BASIN** UPPER MISSISSIPPI RIVER
**MINOR BASIN** RAINY RIVER
**STATION LOCATION** RAINY RIVER AT
BAUDETTE, MINNESOTA 96

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 1 | 2 | 62 | 300 | 0 | 0 | 20 | 0 | 0 | 0 | 200 | 110 | 110 | 180 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 5800 | 50 | 4660 | 20 | 0 | 20 | 0 | 560 | 430 | 180 | 110 | 16 | 5 | 69 | 2 | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 700 | 0 | 0 | 20 | 0 | 0 | 0 | 660 | 50 | 110 | 450 | 69 | 3 | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 1400 | 20 | 0 | 20 | 0 | 110 | 430 | 510 | 280 | 60 | 360 | 65 | 2 | 69 | 2 | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 600 | 0 | 20 | 0 | 0 | 50 | 0 | 400 | 90 | 340 | 200 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 40 | 20 | 0 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 800 | 0 | 0 | 20 | 0 | 150 | 20 | 250 | 390 | 20 | 40 | | | | | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 400 | 0 | 0 | 40 | 0 | 0 | 0 | 40 | 310 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 1300 | 0 | 40 | 0 | 0 | 110 | 0 | 590 | 550 | 190 | 460 | 71 | 2 | 69 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 3400 | 0 | 60 | 150 | 40 | 390 | 100 | 950 | 1660 | 190 | 250 | 69 | 2 | 77 | 2 | 57 | 2 | 92 | 2 | 71 | 1 | 68 | 1 | 93 | 1 | | | | | | |
| 7 | 2 | 62 | 500 | 0 | 0 | 110 | 0 | 0 | 0 | 80 | 300 | 210 | 40 | | | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 900 | 360 | 0 | 160 | 0 | 0 | 0 | 270 | 110 | 70 | 50 | 2 | 1 | 69 | 1 | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 1500 | 210 | 0 | 0 | 0 | 0 | 0 | 990 | 330 | 0 | 120 | 69 | 3 | 2 | 1 | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 1000 | 0 | 0 | 120 | 0 | 40 | 0 | 500 | 330 | 0 | 0 | 71 | 1 | 69 | 1 | 77 | 1 | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 600 | 10 | 0 | 0 | 0 | 0 | 10 | 360 | 180 | 320 | 350 | | | | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 1200 | 60 | 0 | 80 | 0 | 40 | 0 | 500 | 540 | 120 | 80 | 69 | 2 | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA *(Identifiable)* *Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable)* *Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 1 | 2 | 62 | 60 | 22 | 45 | 22 | 61 | 10 | 56 | 7 | 39 | 1050 | 0 | 19 | 15 | 1 | 14 | 1 | | | | | | | 7 | 50 | 1 | 76 | 1 | | | 2 | 1 |
| 2 | 5 | 62 | 60 | 21 | 61 | 16 | 56 | 11 | 83 | 9 | 43 | 4090 | 10 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 60 | 34 | 56 | 13 | 61 | 12 | 45 | 7 | 34 | 10940 | 10 | 6 | 6 | 1 | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 3 | 5 | 62 | 60 | 20 | 56 | 18 | 83 | 12 | 61 | 8 | 42 | 5090 | 0 | 97 | 19 | 5 | | | | | | | | | 3 | 50 | 1 | | | | | 1 | 1 |
| 3 | 19 | 62 | 60 | 15 | 95 | 10 | 56 | 10 | 58 | 9 | 56 | 180 | 0 | 14 | 46 | 2 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | | | | | | | | | | 190 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 65 | 11 | 33 | 10 | 16 | 9 | 56 | 7 | 63 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 5 | 7 | 62 | 60 | 38 | 92 | 10 | 56 | 10 | 61 | 7 | 35 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 92 | 32 | 70 | 13 | 9 | 5 | 60 | 3 | 47 | 0 | 0 | 2 | | | | | | | | | | | 15 | 76 | 2 | 50 | 1 | | | 1 | 0 |
| 6 | 4 | 62 | 60 | 57 | 56 | 10 | 61 | 9 | 92 | 5 | 19 | 60 | 10 | 6 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 60 | 27 | 56 | 20 | 95 | 8 | 92 | 7 | 38 | 790 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 95 | 28 | 56 | 16 | 9 | 12 | 58 | 12 | 32 | 0 | 0 | 59 | 11 | 3 | 22 | 2 | 17 | 1 | 10 | 1 | | | 6 | 76 | 1 | | | | | 1 | 0 |
| 7 | 16 | 62 | 58 | 68 | 95 | 9 | 9 | 5 | 61 | 3 | 15 | 0 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 58 | 52 | 56 | 17 | 47 | 7 | 95 | 6 | 18 | 0 | 0 | 42 | 11 | 2 | 22 | 2 | 46 | 1 | | | | | 6 | 50 | 1 | 76 | 1 | | | 2 | 2 |
| 8 | 20 | 62 | 58 | 25 | 9 | 25 | 56 | 14 | 47 | 6 | 30 | 0 | 0 | 45 | 11 | 3 | 17 | 2 | | | | | | | 6 | 51 | 2 | | | | | 0 | 0 |
| 9 | 4 | 62 | 58 | 19 | 56 | 18 | 57 | 14 | 9 | 13 | 36 | 0 | 0 | 168 | 11 | 4 | 17 | 3 | 22 | 3 | 16 | 3 | 15 | 2 | 9 | 50 | 2 | 76 | 1 | | | 0 | 2 |
| 9 | 17 | 62 | 58 | 29 | 56 | 18 | 45 | 18 | 47 | 7 | 28 | 0 | 0 | 18 | 11 | 2 | | | | | | | | | 0 | | | | | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** MINNESOTA
**MAJOR BASIN** UPPER MISSISSIPPI RIVER
**MINOR BASIN** RAINY RIVER
**STATION LOCATION** RAINY RIVER AT
BAUDETTE, MINNESOTA 96

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 1 | 2 | 62 | 1 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 5 | 6 | 5 | 8 | 7 | | | | | | |
| 1 | 8 | 62 | 1 | 18 | 0 | 1 | 0 | 0 | 0 | 1 | 5 | 4 | 9 | 4 | 14 | 6 | | | | | | |
| 1 | 15 | 62 | 1 | 29 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 5 | 5 | 4 | 10 | 7 | | | | | | |
| 1 | 22 | 62 | 2 | 6 | 0 | 1 | 0 | 0 | 0 | 1 | 8 | 4 | 5 | 4 | 13 | 6 | | | | | | |
| 1 | 29 | 62 | 2 | 14 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 4 | 7 | 4 | 15 | 6 | | | | | | |
| 2 | 5 | 62 | 2 | 16 | 0 | 1 | 0 | 0 | 0 | 1 | 7 | 5 | 8 | 4 | 15 | 7 | | | | | | |
| 2 | 12 | 62 | 2 | 23 | 2 | 1 | 0 | 1 | 2 | 1 | 16 | 6 | 10 | 4 | 26 | 7 | | | | | | |
| 2 | 19 | 62 | 3 | 8 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 4 | 7 | 4 | 15 | 6 | | | | | | |
| 2 | 26 | 62 | 3 | 13 | 1 | 1 | 0 | 0 | 1 | 1 | 30 | 6 | 10 | 4 | 40 | 7 | | | | | | |
| 3 | 5 | 62 | 3 | 20 | 1 | 1 | 0 | 1 | 1 | 1 | 20 | 6 | 5 | 4 | 25 | 7 | | | | | | |
| 3 | 12 | 62 | 3 | 27 | 1 | 1 | 0 | 1 | 1 | 1 | 18 | 5 | 12 | 4 | 30 | 6 | | | | | | |
| 3 | 19 | 62 | 4 | 4 | 0 | 1 | 0 | 2 | 0 | 2 | 11 | 4 | 14 | 6 | 25 | 7 | | | | | | |
| 3 | 26 | 62 | 4 | 9 | 0 | 1 | 0 | 1 | 0 | 1 | 10 | 6 | 7 | 6 | 17 | 8 | | | | | | |
| 4 | 2 | 62 | 4 | 17 | 1 | 1 | 0 | 3 | 1 | 3 | 4 | 8 | 15 | 13 | 19 | 15 | | | | | | |
| 4 | 9 | 62 | 4 | 25 | 1 | 2 | 0 | 1 | 1 | 2 | 0 | 20 | 12 | 20 | 12 | 28 | | | | | | |
| 4 | 14 | 62 | 5 | 22 | 2 | 2 | 0 | 1 | 2 | 2 | 9 | 21 | 13 | 28 | 22 | 35 | | | | | | |
| 4 | 23 | 62 | 5 | 28 | - | - | - | - | - | - | 0 | 29 | 0 | 30 | 0 | 42 | | | | | | |
| 4 | 30 | 62 | 6 | 4 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 5 | 33 | 7 | 35 | 9 | | | | | | |
| 5 | 7 | 62 | 7 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 5 | 27 | 7 | 31 | 9 | | | | | | |
| 5 | 14 | 62 | 6 | 22 | - | - | - | - | - | - | 22 | 7 | 77 | 10 | 99 | 12 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 6 | 111 | 11 | 118 | 13 | | | | | | |
| 5 | 28 | 62 | 7 | 27 | 0 | 0 | 0 | 1 | 0 | 1 | 9 | 5 | 56 | 7 | 65 | 9 | | | | | | |
| 6 | 4 | 62 | 7 | 6 | 0 | 3 | 0 | 1 | 0 | 3 | 25 | 33 | 47 | 8 | 72 | 34 | | | | | | |
| 6 | 11 | 62 | 7 | 16 | 0 | 1 | 0 | 2 | 0 | 2 | 85 | 27 | 93 | 43 | 178 | 51 | | | | | | |
| 6 | 18 | 62 | 7 | 17 | 1 | 3 | 5 | 8 | 6 | 9 | 0 | 78 | 19 | 34 | 19 | 85 | | | | | | |
| 6 | 25 | 62 | 7 | 23 | 2 | 2 | 0 | 2 | 2 | 3 | 45 | 12 | 15 | 12 | 60 | 16 | | | | | | |
| 7 | 2 | 62 | 8 | 10 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 5 | 37 | 6 | 43 | 7 | | | | | | |
| 7 | 9 | 62 | 8 | 15 | 0 | 0 | 0 | 1 | 0 | 1 | 17 | 6 | 49 | 7 | 66 | 9 | | | | | | |
| 7 | 16 | 62 | 8 | 6 | 0 | 0 | 1 | 1 | 1 | 1 | 7 | 5 | 42 | 7 | 49 | 9 | | | | | | |
| 7 | 23 | 62 | 8 | 20 | 0 | 1 | 0 | 0 | 0 | 1 | 23 | 3 | 37 | 3 | 60 | 4 | | | | | | |
| 7 | 30 | 62 | 9 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 8 | 8 | 6 | 48 | 10 | | | | | | |
| 8 | 6 | 62 | 8 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 5 | 46 | 7 | 60 | 8 | | | | | | |
| 8 | 13 | 62 | 10 | 3 | 0 | 2 | 0 | 2 | 0 | 3 | 22 | 38 | 22 | 29 | 44 | 48 | | | | | | |
| 8 | 20 | 62 | 9 | 5 | 0 | 1 | 0 | 0 | 0 | 1 | 15 | 12 | 36 | 7 | 51 | 14 | | | | | | |
| 8 | 27 | 62 | 9 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 10 | 32 | 12 | 39 | 16 | | | | | | |
| 9 | 4 | 62 | 9 | 20 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 10 | 50 | 7 | 55 | 12 | | | | | | |
| 9 | 10 | 62 | 9 | 28 | 0 | 0 | 0 | 1 | 0 | 1 | 18 | 7 | 51 | 8 | 69 | 11 | | | | | | |
| 9 | 17 | 62 | 10 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 29 | 6 | 40 | 7 | 69 | 9 | | | | | | |
| 9 | 24 | 62 | 10 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 30 | 7 | 36 | 9 | | | | | | |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 7 | 9 | 62 | 7 | 16 | 2980 | 257 | 148 | 109 | 3 | 37 | 37 | 3 | 3 | 29 | 2 | 18 | 16 | 1 | 36 |
| 8 | 13 | 62 | 8 | 20 | 2200 | 375 | 192 | 183 | 4 | 58 | 39 | 5 | 3 | 30 | 1 | 23 | 21 | 2 | 45 |
| 9 | 10 | 62 | 9 | 17 | 3850 | 273 | 91 | 182 | 2 | 24 | 25 | 2 | 2 | 21 | 0 | 12 | 6 | 2 | 20 |

NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** MINNESOTA
**MAJOR BASIN** UPPER MISSISSIPPI RIVER
**MINOR BASIN** RAINY RIVER
**STATION LOCATION** RAINY RIVER AT
BAUDETTE, MINNESOTA

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 4 | 2 | 62 | - | - | 7.6 | - | - | - | - | - | 9 | 290 | 368 | 15 | - | 255 | .1 | 702 | - |
| 4 | 9 | 62 | - | - | - | - | - | - | - | - | 18 | 280 | 360 | 5 | - | 270 | .0 | 742 | - |
| 4 | 16 | 62 | - | - | 7.4 | - | - | - | - | - | 8 | 284 | 348 | 5 | 0 | 255 | .5 | 683 | - |
| 4 | 23 | 62 | - | - | - | - | - | - | - | - | 9 | 296 | 360 | 0 | - | 240 | .2 | 699 | - |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | 8 | 84 | 116 | 70 | - | 10 | - | - | - |
| 5 | 7 | 62 | - | - | - | - | - | - | - | - | 5 | - | 84 | 100 | - | 13 | - | - | - |
| 6 | 11 | 62 | - | - | 8.3 | - | - | - | - | - | 16 | 420 | 1050 | 20 | *25 | 725 | .0 | 1600 | - |
| 6 | 18 | 62 | - | - | - | - | - | - | - | - | 13 | 300 | 692 | 40 | 25 | 430 | .2 | 925 | - |
| 6 | 25 | 62 | - | - | - | - | - | - | - | - | 8 | 146 | 308 | 50 | 160 | 170 | - | - | - |
| 7 | 23 | 62 | - | - | - | - | - | - | - | - | 9 | - | - | 120 | 93 | - | - | 137 | - |
| 7 | 30 | 62 | - | - | 8.0 | - | - | - | - | - | 5 | 44 | 160 | 120 | 47 | 8 | .0 | - | - |
| 8 | 6 | 62 | - | - | 7.9 | - | - | - | - | - | 5 | 50 | 64 | 120 | *25 | - | .0 | - | - |
| 8 | 13 | 62 | - | - | - | - | 43 | - | - | - | 14 | 524 | 910 | 30 | 25 | 400 | - | 1234 | - |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | 33 | 136 | 272 | 60 | 25 | 85 | .0 | 369 | - |
| 9 | 4 | 62 | - | - | 7.8 | - | - | - | - | - | 8 | 40 | 150 | 50 | 25 | 18 | .0 | - | - |
| 9 | 10 | 62 | - | - | - | - | - | - | - | - | 8 | 88 | 170 | 60 | 25 | 20 | - | - | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Manitou Rapids, Minnesota
Operated by U.S. Geological Survey

| | |
|---|---|
| STATE | Minnesota |
| MAJOR BASIN | Upper Mississippi River |
| MINOR BASIN | Rainy River |
| STATION LOCATION | Rainy River at<br>Baudette, Minnesota |

| October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10.700 | 10.000 | 9.000 | 11.300 | 8.800 | 11.300 | 10.600 | 25.800 | 39.900 | 26.200 | 16.800 | 19.600 |
| 11.000 | 8.860 | 9.900 | 11.000 | 8.600 | 12.300 | 9.430 | 25.300 | 39.700 | 24.300 | 16.700 | 20.100 |
| 11.100 | 8.790 | 9.850 | 11.000 | 8.700 | 12.400 | 9.870 | 23.900 | 38.800 | 23.900 | 16.500 | 19.400 |
| 11.400 | 8.880 | 8.900 | 10.000 | 8.800 | 12.400 | 10.600 | 22.400 | 37.700 | 24.400 | 16.600 | 19.100 |
| 11.600 | 7.420 | 8.000 | 8.800 | 8.300 | 11.400 | 11.100 | 20.800 | 36.700 | 24.800 | 17.200 | 17.500 |
| 11.600 | 7.560 | 9.200 | 10.200 | 7.900 | 12.000 | 11.900 | 19.800 | 35.800 | 25.200 | 19.100 | 15.400 |
| 11.400 | 9.080 | 10.000 | 9.700 | 8.300 | 12.400 | 12.000 | 18.200 | 35.100 | 28.300 | 26.500 | 13.400 |
| 10.500 | 9.320 | 9.800 | 9.400 | 9.000 | 12.400 | 12.200 | 17.700 | 34.700 | 35.700 | 30.600 | 12.900 |
| 9.020 | 9.180 | 9.800 | 9.300 | 9.300 | 12.400 | 11.300 | 17.500 | 34.100 | 42.000 | 30.900 | 13.400 |
| 8.380 | 8.970 | 9.400 | 10.200 | 10.200 | 12.300 | 12.200 | 17.500 | 33.600 | 49.900 | 31.100 | 13.200 |
| 10.100 | 8.490 | 8.600 | 10.000 | 9.100 | 12.500 | 12.300 | 17.600 | 33.200 | 51.600 | 30.900 | 20.100 |
| 10.900 | 6.400 | 9.000 | 10.200 | 8.200 | 11.000 | 12.100 | 17.900 | 32.800 | 48.100 | 30.100 | 25.100 |
| 11.100 | 7.000 | 9.500 | 10.500 | 9.000 | 11.800 | 12.000 | 17.700 | 32.000 | 43.600 | 30.400 | 27.100 |
| 11.300 | 7.600 | 9.800 | 8.900 | 9.800 | 12.200 | 11.800 | 17.700 | 30.400 | 40.200 | 30.800 | 26.900 |
| 10.800 | 7.160 | 10.200 | 9.000 | 9.800 | 12.300 | 11.500 | 20.100 | 29.400 | 36.700 | 30.400 | 23.600 |
| 11.600 | 7.500 | 10.400 | 8.600 | 10.200 | 12.400 | 11.500 | 22.000 | 27.000 | 34.500 | 29.600 | 21.400 |
| 12.000 | 7.800 | 10.500 | 8.800 | 10.200 | 12.400 | 11.100 | 26.300 | 26.200 | 32.900 | 28.800 | 20.200 |
| 12.400 | 7.900 | 10.000 | 8.600 | 10.000 | 12.500 | 12.800 | 37.300 | 26.400 | 31.600 | 28.000 | 19.600 |
| 12.200 | 7.760 | 9.500 | 8.400 | 9.200 | 11.000 | 14.300 | 46.500 | 31.900 | 28.400 | 27.300 | 17.000 |
| 11.200 | 7.880 | 10.300 | 8.400 | 9.600 | 11.100 | 15.500 | 51.000 | 34.600 | 26.900 | 26.200 | 15.600 |
| 10.200 | 9.020 | 10.600 | 7.600 | 10.400 | 11.000 | 17.700 | 50.100 | 35.800 | 25.000 | 22.300 | 14.100 |
| 8.820 | 8.880 | 10.700 | 7.500 | 10.700 | 11.000 | 18.900 | 46.900 | 35.200 | 25.200 | 20.400 | 13.100 |
| 8.990 | 9.290 | 10.800 | 8.100 | 10.400 | 10.700 | 19.000 | 47.500 | 34.600 | 25.400 | 20.000 | 12.600 |
| 10.700 | 9.250 | 10.800 | 8.700 | 10.600 | 10.600 | 19.200 | 50.700 | 33.800 | 24.000 | 19.900 | 11.700 |
| 10.900 | 9.500 | 11.000 | 8.400 | 10.700 | 10.600 | 19.100 | 54.100 | 33.200 | 23.300 | 19.700 | 12.200 |
| 10.400 | 9.710 | 11.200 | 8.500 | 10.300 | 9.360 | 18.700 | 54.800 | 32.600 | 23.100 | 19.100 | 12.600 |
| 10.300 | 9.270 | 11.400 | 8.600 | 10.700 | 9.870 | 18.700 | 52.700 | 31.800 | 22.600 | 17.600 | 12.800 |
| 10.200 | 8.820 | 10.500 | 7.900 | 11.000 | 10.500 | 19.800 | 48.900 | 31.300 | 20.000 | 18.200 | 12.800 |
| 9.060 | 9.540 | 9.600 | 7.500 | | 10.600 | 22.700 | 45.400 | 28.500 | 18.200 | 18.700 | 12.700 |
| 8.930 | 9.250 | 10.300 | 8.000 | | 10.700 | 24.500 | 43.600 | 27.000 | 17.000 | 18.700 | 12.500 |
| 9.540 | | 10.900 | 8.400 | | 10.700 | | 40.600 | | 16.900 | 18.700 | |

MINOR BASIN RAINY RIVER

**STATION LOCATION** RAINY RIVER AT

INTERNATIONAL FALLS, MINNESOTA 101

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 11 | 21 | 61 | 500 | 0 | 0 | 0 | 0 | 20 | 0 | 440 | 40 | 20 | 60 | 69 | 1 | 71 | 1 | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 310 | 80 | 40 | 0 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 800 | 20 | 20 | 0 | 0 | 70 | 0 | 560 | 110 | 0 | 20 | 69 | 2 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 20 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 100 | 0 | 0 | 0 | 0 | 50 | 20 | 50 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 20 | 60 | 60 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 100 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 100 | 0 | 0 | 20 | 0 | 20 | 0 | 20 | 0 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 1800 | 0 | 0 | 20 | 0 | 890 | 0 | 780 | 130 | 130 | 20 | 57 | 3 | 71 | 3 | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 1500 | 0 | 20 | 20 | 0 | 0 | 0 | 1180 | 270 | 170 | 60 | 71 | 3 | 69 | 1 | | | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 900 | 0 | 0 | 0 | 0 | 380 | 0 | 340 | 210 | 170 | 40 | 57 | 2 | 69 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 3300 | 40 | 0 | 0 | 0 | 0 | 0 | 840 | 2450 | 380 | 1180 | 92 | 4 | 71 | 2 | 68 | 2 | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 500 | 0 | 0 | 40 | 0 | 40 | 0 | 250 | 170 | 130 | 130 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 400 | 20 | 0 | 40 | 0 | 50 | 0 | 160 | 90 | 50 | 20 | | | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 800 | 0 | 0 | 0 | 0 | 60 | 20 | 540 | 170 | 80 | 120 | 69 | 2 | 68 | 1 | | | | | | | | | | | | | | | | |
| 8 | 21 | 62 | 800 | 0 | 0 | 0 | 0 | 0 | 0 | 380 | 420 | 0 | 80 | 69 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 1500 | 0 | 130 | 0 | 0 | 0 | 0 | 760 | 590 | 250 | 170 | 69 | 2 | 93 | 2 | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 1000 | 0 | 0 | 0 | 0 | 0 | 0 | 340 | 660 | 40 | 250 | 92 | 1 | 71 | 1 | 68 | 1 | | | | | | | | | | | | | | |

| DATE OF SAMPLE |  |  | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) |  |  |  |  |  |  |  |  | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |  |  |  |  | PROTOZOA (Identifiable) Number per ml. | ROTIFERS |  |  |  |  |  |  |  |  |  |  | CRUSTACEA |  |  |  |  |  |  | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
|  |  |  | 1ST |  | 2ND |  | 3RD |  | 4TH |  | OTHER SPECIES PERCENT |  |  | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) 1ST |  | 2ND |  | 3RD |  | 4TH |  | 5TH |  | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) 1ST |  | 2ND |  | 3RD |  |  |  |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT |  |  |  |  | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |  | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |  |  |
| 11 | 21 | 61 | 61 | 36 | 60 | 24 | 58 | 20 | 83 | 5 | 15 | 0 | 0 | 18 | 11 | 1 | 17 | 1 |  |  |  |  |  |  | 3 | 76 | 1 |  |  |  |  | 0 | 0 |
| 12 | 4 | 61 | 61 | 48 | 60 | 16 | 83 | 15 | 58 | 6 | 15 | 0 | 10 | 18 | 11 | 2 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  | 0 | 0 |
| 12 | 18 | 61 | 61 | 68 | 60 | 14 | 57 | 6 | 84 | 3 | 9 | 110 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 1 | 2 | 62 | 61 | 36 | 38 | 9 | 57 | 8 | 56 | 5 | 42 | 0 | 0 | 19 | 11 | 2 | 14 | 1 |  |  |  |  |  |  | 4 |  |  |  |  |  |  | 0 | 0 |
| 1 | 15 | 62 |  |  |  |  |  |  |  |  |  | 0 | 10 | 8 |  |  |  |  |  |  |  |  |  |  | 3 | 76 | 1 |  |  |  |  | 0 | 0 |
| 2 | 5 | 62 |  |  |  |  |  |  |  |  |  | 0 | 0 | 6 |  |  |  |  |  |  |  |  |  |  | 4 |  |  |  |  |  |  | 0 | 0 |
| 2 | 19 | 62 |  |  |  |  |  |  |  |  |  | 210 | 0 | 2 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 1 | 0 |
| 3 | 5 | 62 | 61 | 28 | 57 | 13 | 45 | 9 | 9 | 6 | 44 | 0 | 0 | 0 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  | 0 | 0 |
| 3 | 19 | 62 |  |  |  |  |  |  |  |  |  | 20 | 0 | 5 |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  | 0 | 0 |
| 4 | 2 | 62 | 61 | 21 | 60 | 12 | 9 | 6 | 82 | 4 | 57 | 0 | 0 | 3 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  | 0 | 0 |
| 4 | 16 | 62 | 60 | 23 | 61 | 16 | 58 | 7 | 45 | 5 | 49 | 0 | 0 | 3 |  |  |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  | 0 | 0 |
| 5 | 7 | 62 | 60 | 39 | 82 | 7 | 61 | 6 | 31 | 6 | 42 | 110 | 0 | 3 |  |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  | 0 | 0 |
| 5 | 21 | 62 | 60 | 62 | 82 | 5 | 56 | 5 | 61 | 3 | 25 | 0 | 10 | 18 | 21 | 1 |  |  |  |  |  |  |  |  | 11 | 50 | 2 |  |  |  |  | 0 | 1 |
| 6 | 4 | 62 | 60 | 39 | 56 | 17 | 61 | 8 | 9 | 6 | 30 | 0 | 0 | 28 | 10 | 1 | 11 | 1 | 17 | 1 |  |  |  |  | 9 | 76 | 1 | 50 | 1 |  |  | 0 | 0 |
| 6 | 18 | 62 | 56 | 23 | 95 | 19 | 92 | 17 | 58 | 8 | 33 | 0 | 10 | 120 | 11 | 4 | 10 | 3 | 17 | 2 | 22 | 1 | 46 | 1 | 14 | 76 | 2 | 50 | 1 |  |  | 0 | 0 |
| 7 | 2 | 62 | 95 | 55 | 9 | 12 | 58 | 9 | 24 | 6 | 18 | 0 | 0 | 41 | 17 | 2 | 10 | 2 | 22 | 1 | 11 | 1 |  |  | 5 | 76 | 1 |  |  |  |  | 0 | 0 |
| 7 | 16 | 62 | 58 | 66 | 95 | 11 | 9 | 6 | 57 | 4 | 13 | 140 | 0 | 14 | 17 | 1 |  |  |  |  |  |  |  |  | 13 | 50 | 2 | 76 | 1 |  |  | 0 | 0 |
| 8 | 6 | 62 | 58 | 75 | 57 | 6 | 24 | 5 | 47 | 4 | 10 | 0 | 0 | 159 | 17 | 4 | 11 | 4 | 21 | 2 | 5 | 2 | 2 | 1 | 50 | 50 | 4 | 76 | 3 | 53 | 2 | 0 | 0 |
| 8 | 21 | 62 | 58 | 31 | 56 | 19 | 9 | 16 | 47 | 9 | 25 | 0 | 0 | 71 | 11 | 3 | 17 | 2 | 22 | 2 | 10 | 1 | 15 | 1 | 21 | 50 | 3 | 98 | 2 |  |  | 0 | 0 |
| 9 | 4 | 62 | 95 | 24 | 58 | 21 | 56 | 14 | 47 | 8 | 33 | 0 | 0 | 178 | 17 | 4 | 11 | 3 | 21 | 3 | 22 | 2 | 46 | 1 | 48 | 50 | 4 | 76 | 3 | 51 | 2 | 0 | 0 |
| 9 | 17 | 62 | 58 | 29 | 56 | 20 | 45 | 10 | 9 | 9 | 32 | 0 | 0 | 283 | 11 | 5 | 17 | 4 | 22 | 3 | 21 | 1 | 16 | 1 | 33 | 50 | 3 | 76 | 3 |  |  | – | – |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** MINNESOTA
**MAJOR BASIN** UPPER MISSISSIPPI RIVER
**MINOR BASIN** RAINY RIVER
**STATION LOCATION** RAINY RIVER AT
INTERNATIONAL FALLS, MINNESOTA 101

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 11 | 21 | 61 | 12 | 4 | 0 | 1 | 0 | 0 | 0 | 1 | 6 | 4 | 12 | 4 | 18 | 6 | | | | | | |
| 11 | 27 | 61 | 12 | 11 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 4 | 17 | 4 | 22 | 6 | | | | | | |
| 12 | 4 | 61 | 12 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 4 | 23 | 4 | 35 | 6 | | | | | | |
| 12 | 11 | 61 | 12 | 19 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 4 | 17 | 4 | 19 | 6 | | | | | | |
| 12 | 18 | 61 | 1 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 4 | 10 | 4 | 11 | 6 | | | | | | |
| 12 | 26 | 61 | 1 | 5 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 4 | 13 | 4 | 16 | 6 | | | | | | |
| 1 | 2 | 62 | 1 | 12 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 4 | 11 | 4 | 14 | 6 | | | | | | |
| 1 | 8 | 62 | 1 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 12 | 4 | 16 | 6 | | | | | | |
| 1 | 15 | 62 | 1 | 24 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 5 | 8 | 5 | 8 | 7 | | | | | | |
| 1 | 22 | 62 | 1 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 8 | 5 | 10 | 7 | | | | | | |
| 1 | 29 | 62 | 2 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 10 | 4 | 10 | 6 | | | | | | |
| 2 | 5 | 62 | 2 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 9 | 5 | 11 | 7 | | | | | | |
| 2 | 12 | 62 | 2 | 26 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 4 | 10 | 4 | 11 | 6 | | | | | | |
| 2 | 19 | 62 | 3 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 5 | 10 | 5 | 12 | 7 | | | | | | |
| 2 | 26 | 62 | 3 | 9 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 4 | 8 | 4 | 8 | 6 | | | | | | |
| 3 | 5 | 62 | 3 | 15 | 0 | 2 | 0 | 1 | 0 | 2 | 0 | 9 | 9 | 5 | 9 | 10 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 4 | 7 | 4 | 7 | 6 | | | | | | |
| 3 | 19 | 62 | 3 | 30 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 4 | 9 | 5 | 10 | 6 | | | | | | |
| 3 | 26 | 62 | 4 | 5 | 0 | 2 | 0 | 1 | 0 | 2 | 4 | 7 | 8 | 4 | 12 | 8 | | | | | | |
| 4 | 2 | 62 | 4 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 6 | 4 | 7 | 6 | | | | | | |
| 4 | 10 | 62 | 4 | 23 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 4 | 18 | 4 | 21 | 5 | | | | | | |
| 4 | 16 | 62 | 5 | 23 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 6 | 12 | 6 | 12 | 8 | | | | | | |
| 4 | 23 | 62 | 5 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 22 | 6 | 23 | 7 | | | | | | |
| 5 | 14 | 62 | 6 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 5 | 28 | 6 | 35 | 8 | | | | | | |
| 5 | 21 | 62 | 6 | 25 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 6 | 33 | 7 | 36 | 9 | | | | | | |
| 5 | 28 | 62 | 6 | 28 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 5 | 41 | 6 | 48 | 7 | | | | | | |
| 6 | 4 | 62 | 7 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 5 | 38 | 6 | 45 | 8 | | | | | | |
| 6 | 11 | 62 | 7 | 9 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 5 | 23 | 7 | 30 | 9 | | | | | | |
| 6 | 18 | 62 | 7 | 17 | 0 | 1 | 1 | 1 | 1 | 1 | 22 | 10 | 42 | 6 | 64 | 12 | | | | | | |
| 6 | 25 | 62 | 7 | 20 | 0 | 1 | 0 | 0 | 0 | 1 | 11 | 4 | 45 | 5 | 56 | 6 | | | | | | |
| 7 | 2 | 62 | 8 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 3 | 37 | 3 | 45 | 4 | | | | | | |
| 7 | 24 | 62 | 8 | 21 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 5 | 37 | 6 | 45 | 7 | | | | | | |
| 7 | 30 | 62 | 8 | 17 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 5 | 36 | 6 | 38 | 7 | | | | | | |
| 8 | 6 | 62 | 8 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 24 | 6 | 30 | 7 | | | | | | |
| 8 | 13 | 62 | 8 | 31 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 6 | 36 | 6 | 41 | 8 | | | | | | |
| 8 | 21 | 62 | 9 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 30 | 6 | 35 | 7 | | | | | | |
| 8 | 27 | 62 | 9 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 6 | 30 | 8 | 41 | 10 | | | | | | |
| 9 | 4 | 62 | 9 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 5 | 29 | 6 | 54 | 7 | | | | | | |
| 9 | 10 | 62 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 6 | 5 | 8 | 7 | | | | | | |

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**MINOR BASIN** RAINY RIVER

**STATION LOCATION** RAINY RIVER AT

INTERNATIONAL FALLS, MINNESOTA 101

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 11 | 28 | 61 | 12 | 13 | 5070 | 233 | 58 | 175 | 1 | 16 | 17 | 3 | 1 | 13 | 0 | 5 | 4 | 1 | 14 |
| 1 | 16 | 62 | 1 | 31 | 5163 | 223 | 66 | 157 | 9 | 19 | 9 | 1 | 1 | 7 | 0 | 6 | 5 | 1 | 17 |
| 2 | 5 | 62 | 2 | 20 | 5149 | 335 | 104 | 231 | 8 | 24 | 15 | 1 | 1 | 12 | 1 | 8 | 8 | 1 | 40 |
| 3 | 5 | 62 | 3 | 20 | 5196 | 292 | 116 | 176 | 21 | 26 | 15 | 1 | 1 | 12 | 1 | 8 | 11 | 1 | 34 |
| 4 | 9 | 62 | 4 | 24 | 5157 | 271 | 109 | 162 | 4 | 33 | 16 | 1 | 1 | 13 | 1 | 10 | 13 | 1 | 32 |
| 5 | 7 | 62 | 5 | 22 | 5123 | 266 | 161 | 105 | 11 | 45 | 21 | 2 | 1 | 18 | 0 | 13 | 20 | 1 | 50 |
| 6 | 4 | 62 | 6 | 20 | 5105 | 289 | 139 | 150 | 7 | 38 | 22 | 1 | 1 | 18 | 2 | 15 | 15 | 2 | 40 |
| 7 | 2 | 62 | 7 | 17 | 5067 | 303 | 170 | 133 | 5 | 53 | 25 | 2 | 0 | 21 | 2 | 15 | 17 | 2 | 53 |
| 7 | 30 | 62 | 8 | 14 | 5116 | 272 | 159 | 113 | 5 | 51 | 25 | 1 | 3 | 20 | 1 | 14 | 22 | 2 | 40 |
| 9 | 4 | 62 | 9 | 19 | 5125 | 256 | 114 | 142 | 1 | 38 | 21 | 1 | 1 | 19 | 0 | 13 | 14 | 1 | 26 |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** MINNESOTA
**MAJOR BASIN** UPPER MISSISSIPPI RIVER
**MINOR BASIN** RAINY RIVER
**STATION LOCATION** RAINY RIVER AT
INTERNATIONAL FALLS, MINNESOTA 101

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 11 | 21 | 61 | 1.7 | 12.8 | 7.1 | 1.3 | 42 | 3.5 | 8.3 | .6 | 3 | 20 | 22 | 41 | 1 | 8 | .0 | 26 | 40 |
| 11 | 27 | 61 | .4 | 12.8 | 7.2 | 1.4 | 46 | 2.3 | 7.3 | .7 | - | 18 | 24 | 35 | 1 | 7 | .0 | 37 | 59 |
| 12 | 4 | 61 | 1.1 | 12.9 | 7.2 | 1.1 | 49 | 4.3 | 10.9 | .3 | 2 | 18 | 18 | 27 | 1 | 6 | - | 36 | 100 |
| 12 | 11 | 61 | .7 | 12.9 | 7.0 | 1.9 | 33 | 4.0 | 12.0 | .5 | - | 18 | 23 | 45 | 1 | 7 | - | 43 | 57 |
| 12 | 18 | 61 | .8 | 12.7 | 7.2 | 1.7 | 39 | 4.0 | 9.3 | .5 | - | 18 | 23 | 24 | 1 | 6 | - | 52 | 40 |
| 12 | 26 | 61 | .4 | 12.9 | 7.0 | 1.3 | 45 | 4.0 | 9.0 | .5 | - | 19 | 25 | 22 | 2 | 8 | - | 47 | 7 |
| 1 | 2 | 62 | .6 | 12.5 | 6.9 | 1.5 | 60 | 3.6 | - | .5 | 4 | 16 | 25 | 23 | 1 | 8 | .0 | 36 | 31 |
| 1 | 8 | 62 | .4 | 12.4 | 6.9 | 1.5 | 40 | 4.4 | 9.8 | .6 | - | 18 | 24 | 25 | 1 | 5 | - | 57 | 4 |
| 1 | 15 | 62 | .7 | 12.4 | 7.0 | .9 | 32 | 4.3 | 9.4 | .4 | 6 | 19 | 24 | 20 | 1 | 6 | .0 | 40 | 34 |
| 1 | 22 | 62 | .5 | 12.3 | 7.0 | 1.0 | 36 | 5.2 | 9.6 | .4 | 4 | 19 | 26 | 19 | 1 | 6 | .0 | 52 | 22 |
| 1 | 29 | 62 | .5 | 12.5 | 6.9 | 1.0 | 32 | 4.3 | 9.5 | .4 | 6 | 21 | 24 | 21 | 1 | 6 | - | 54 | 25 |
| 2 | 5 | 62 | .9 | 12.5 | 7.1 | .8 | 48 | 4.3 | 9.7 | .5 | 2 | 21 | 24 | 21 | 1 | 6 | .1 | 41 | 5 |
| 2 | 12 | 62 | .7 | 12.5 | 7.0 | 3.2 | 37 | 3.8 | 10.7 | .5 | - | 18 | 23 | 22 | 1 | 6 | - | 50 | 22 |
| 2 | 19 | 62 | .8 | 12.5 | 7.1 | 1.4 | 44 | 4.0 | 9.4 | .5 | 3 | 22 | 25 | 23 | 0 | 6 | - | 42 | 27 |
| 2 | 26 | 62 | .5 | 12.5 | 7.0 | 1.5 | 30 | 4.0 | 8.9 | .5 | - | 21 | 24 | 26 | 1 | 6 | - | 51 | 26 |
| 3 | 5 | 62 | .6 | 11.9 | 6.9 | 1.1 | 28 | 4.3 | 8.7 | .5 | - | 19 | 25 | 21 | 1 | 7 | - | 46 | 37 |
| 3 | 12 | 62 | .7 | 12.0 | 7.0 | 1.0 | 32 | 3.9 | 8.5 | .6 | 0 | 20 | 27 | 21 | 1 | 7 | .0 | 44 | 11 |
| 3 | 19 | 62 | .7 | 11.9 | 6.8 | 1.1 | 26 | 3.6 | 8.1 | .5 | - | 20 | 26 | 20 | 0 | 7 | - | 60 | 180 |
| 3 | 26 | 62 | 1.2 | 11.6 | 7.0 | .7 | 43 | 3.3 | 8.1 | .5 | - | 20 | 26 | 20 | 0 | 6 | - | 45 | 220 |
| 4 | 2 | 62 | 1.2 | 11.9 | 6.8 | .9 | 26 | 4.2 | 9.4 | .5 | 9 | 21 | 30 | 23 | 0 | 6 | - | 30 | 100 |
| 4 | 10 | 62 | .9 | 12.3 | 7.0 | 1.2 | 39 | 3.9 | 8.3 | .6 | 3 | 20 | 23 | 18 | 0 | 6 | - | 47 | 73 |
| 4 | 16 | 62 | 1.7 | 12.2 | 7.0 | .5 | 28 | 4.5 | 11.5 | .6 | 3 | 21 | 24 | 24 | 1 | 6 | - | 62 | 140 |
| 4 | 23 | 62 | 2.6 | 11.3 | 6.8 | .6 | 25 | 3.9 | 9.8 | .6 | - | 21 | 25 | 21 | 1 | 7 | - | 35 | 77 |
| 4 | 30 | 62 | 4.8 | 11.7 | 6.8 | .6 | 30 | 4.3 | 10.8 | .6 | - | 18 | 22 | 18 | 1 | 7 | - | 44 | 190 |
| 5 | 7 | 62 | 4.5 | 12.2 | 6.8 | .9 | 27 | 4.3 | 10.9 | .6 | - | 17 | 25 | 25 | 2 | 7 | - | 41 | 77 |
| 5 | 14 | 62 | 6.4 | 12.2 | 6.9 | .6 | 36 | 4.5 | 10.2 | .6 | 4 | 19 | 26 | 28 | 2 | 7 | - | 53 | 400 |
| 5 | 21 | 62 | 9.9 | 11.3 | 6.9 | .8 | 29 | 5.4 | 12.6 | .6 | - | 18 | 27 | 30 | 3 | 7 | - | 50 | 80 |
| 5 | 28 | 62 | 11.2 | 10.3 | 7.0 | 1.0 | 36 | 6.9 | 13.2 | .6 | - | 19 | 25 | 58 | 2 | 7 | - | 51 | 10 |
| 6 | 4 | 62 | 13.0 | 11.2 | 7.0 | 1.0 | 37 | 5.3 | 14.2 | .5 | - | 20 | 25 | 35 | 2 | 7 | - | 48 | 60 |
| 6 | 11 | 62 | 15.7 | 9.6 | 6.9 | 1.2 | 41 | 5.9 | 11.8 | .6 | - | 19 | 21 | 27 | 1 | 4 | - | 47 | 35 |
| 6 | 18 | 62 | 15.7 | 8.7 | 6.9 | 1.3 | 25 | 5.2 | 12.4 | .7 | - | 19 | 21 | 26 | 2 | 4 | - | 43 | 730 |
| 6 | 25 | 62 | 17.1 | 8.4 | 6.7 | 1.1 | 32 | 4.7 | 11.5 | .7 | 3 | 19 | 20 | 34 | 2 | 6 | - | 59 | 270 |
| 7 | 2 | 62 | 19.9 | 8.0 | 6.9 | 1.1 | 32 | 4.9 | 10.3 | .8 | - | 17 | 22 | 32 | 1 | 6 | - | - | 160 |
| 7 | 9 | 62 | 18.9 | 8.0 | 6.7 | .7 | 14 | 4.9 | 11.6 | .8 | - | 23 | 27 | 36 | 2 | 6 | - | 41 | 2000 |
| 7 | 16 | 62 | 19.5 | 8.3 | 6.9 | .9 | 28 | 6.2 | 12.8 | .7 | - | 20 | 25 | 36 | 2 | 6 | - | 36 | 120 |
| 7 | 24 | 62 | 20.1 | 7.3 | 7.0 | .8 | 34 | - | - | .7 | - | 19 | 21 | 32 | 1 | 6 | - | 48 | 180 |
| 7 | 30 | 62 | 19.3 | 7.2 | 6.9 | .8 | 25 | 5.6 | 12.2 | .7 | - | 18 | 20 | 28 | 1 | 6 | - | 47 | 120 |
| 8 | 6 | 62 | 20.7 | 7.3 | 6.9 | 1.0 | 23 | 5.4 | 14.2 | .8 | - | 19 | 20 | 26 | 2 | 6 | - | 53 | 1100 |
| 8 | 13 | 62 | 19.4 | 7.6 | 7.2 | .7 | 37 | 5.6 | 12.4 | .6 | 4 | 18 | 20 | 34 | 1 | 6 | - | 49 | 110 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at International Falls, Minnesota
Data Supplied by International Joint Commission

STATE Minnesota

MAJOR BASIN Upper Mississippi River

MINOR BASIN Rainy River

STATION LOCATION Rainy River at International Falls, Minnesota

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.850 | 7.750 | 9.260 | 10.400 | 8.130 | 12.000 | 8.450 | 10.300 | 29.100 | 20.300 | 13.200 | 18.800 |
| 2 | 8.960 | 7.600 | 9.250 | 10.700 | 8.440 | 12.000 | 10.200 | 10.000 | 28.900 | 20.500 | 13.300 | 18.000 |
| 3 | 9.570 | 8.460 | 7.540 | 9.720 | 8.540 | 12.000 | 10.100 | 10.200 | 29.000 | 21.200 | 13.300 | 17.900 |
| 4 | 9.900 | 5.740 | 8.410 | 9.870 | 7.970 | 10.000 | 10.100 | 10.100 | 29.400 | 21.800 | 13.300 | 16.000 |
| 5 | 9.800 | 6.950 | 9.280 | 10.800 | 6.980 | 11.800 | 10.000 | 10.000 | 29.700 | 22.100 | 12.400 | 13.900 |
| 6 | 9.860 | 9.230 | 9.410 | 9.070 | 8.160 | 11.900 | 9.960 | 9.410 | 28.600 | 22.100 | 20.200 | 11.900 |
| 7 | 8.850 | 8.620 | 9.210 | 9.060 | 8.680 | 12.100 | 10.100 | 10.100 | 29.500 | 22.400 | 20.600 | 11.400 |
| 8 | 6.940 | 8.670 | 9.200 | 8.480 | 8.980 | 12.000 | 8.100 | 10.100 | 28.800 | 21.800 | 20.600 | 11.400 |
| 9 | 6.450 | 8.450 | 8.920 | 10.200 | 9.060 | 12.000 | 9.680 | 10.000 | 29.300 | 21.900 | 23.400 | 9.000 |
| 10 | 9.220 | 8.210 | 7.510 | 9.460 | 8.870 | 12.100 | 10.100 | 10.000 | 29.400 | 25.700 | 24.100 | 16.700 |
| 11 | 9.520 | 4.370 | 8.020 | 9.810 | 7.120 | 9.540 | 9.900 | 10.200 | 29.100 | 28.000 | 24.200 | 21.300 |
| 12 | 9.100 | 7.180 | 8.920 | 10.100 | 8.110 | 11.800 | 9.970 | 10.200 | 29.000 | 28.800 | 24.000 | 22.500 |
| 13 | 9.210 | 7.480 | 9.110 | 8.110 | 9.790 | 12.000 | 10.100 | 8.700 | 27.400 | 29.200 | 24.200 | 22.500 |
| 14 | 10.400 | 5.900 | 10.100 | 8.120 | 9.700 | 11.900 | 9.860 | 10.000 | 26.900 | 29.300 | 24.000 | 18.500 |
| 15 | 9.200 | 6.720 | 10.200 | 8.020 | 9.710 | 11.900 | 10.200 | 10.100 | 22.900 | 29.200 | 24.000 | 17.000 |
| 16 | 10.400 | 7.030 | 10.200 | 8.690 | 9.970 | 12.000 | 9.270 | 10.100 | 22.200 | 29.200 | 24.000 | 16.600 |
| 17 | 10.600 | 7.220 | 9.180 | 8.220 | 9.750 | 12.000 | 9.990 | 15.000 | 20.600 | 29.000 | 23.900 | 16.900 |
| 18 | 10.700 | 6.900 | 9.060 | 8.040 | 8.410 | 10.300 | 10.000 | 24.000 | 25.300 | 24.900 | 24.000 | 13.500 |
| 19 | 9.200 | 7.610 | 9.680 | 8.200 | 8.730 | 10.700 | 9.960 | 29.200 | 25.600 | 23.600 | 23.800 | 13.100 |
| 20 | 8.830 | 9.250 | 10.400 | 7.080 | 10.100 | 10.600 | 9.950 | 27.700 | 28.000 | 20.800 | 18.300 | 11.700 |
| 21 | 6.650 | 8.160 | 10.400 | 7.040 | 10.300 | 10.600 | 9.840 | 28.400 | 28.600 | 20.600 | 17.000 | 11.100 |
| 22 | 8.150 | 9.190 | 10.300 | 7.080 | 10.100 | 10.500 | 9.220 | 27.800 | 28.400 | 20.400 | 17.000 | 11.000 |
| 23 | 10.300 | 8.120 | 10.400 | 8.820 | 10.300 | 10.500 | 9.920 | 27.800 | 28.500 | 18.300 | 17.000 | 9.440 |
| 24 | 9.660 | 9.470 | 10.400 | 7.860 | 10.700 | 10.600 | 9.960 | 27.700 | 28.500 | 16.900 | 17.000 | 11.000 |
| 25 | 9.040 | 9.450 | 10.700 | 8.250 | 9.550 | 8.750 | 9.950 | 27.800 | 28.400 | 17.100 | 17.000 | 11.000 |
| 26 | 9.330 | 8.200 | 10.800 | 8.530 | 10.500 | 10.300 | 10.100 | 27.700 | 28.400 | 17.000 | 14.300 | 11.100 |
| 27 | 9.510 | 7.700 | 9.100 | 7.200 | 10.800 | 10.500 | 10.000 | 28.200 | 28.200 | 13.700 | 16.600 | 11.400 |
| 28 | 7.500 | 9.180 | 9.840 | 6.550 | 10.700 | 10.400 | 10.000 | 28.400 | 24.100 | 13.300 | 16.800 | 11.300 |
| 29 | 8.050 | 8.320 | 9.860 | 7.700 |  | 10.500 | 8.650 | 28.700 | 22.100 | 12.200 | 17.100 | 11.300 |
| 30 | 8.650 | 8.360 | 10.400 | 8.300 |  | 10.500 | 9.960 | 28.600 | 22.200 | 13.200 | 17.100 | 9.390 |
| 31 | 9.150 |  | 10.800 | 8.640 |  | 10.500 |  | 26.400 |  | 13.300 | 18.300 |  |

## PERTH AMBOY, NEW JERSEY 123A

/FIVE FEET BELOW SURFACE/

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 27 | 62 | 9 | 19 | 3 | 8 | 0 | 70 | 3 | 71 | 36 | 121 | 129 | 286 | 165 | 311 | | | | | | |

**MINOR BASIN** NEW JERSEY-N.Y. METROPOLITAN AREA

**STATION LOCATION** RARITAN RIVER AT

PERTH AMBOY, NEW JERSEY 123A

/FIVE FEET BELOW SURFACE/

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | | 1ST | | 2ND | | 3RD | | 4TH. | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 8 | 6 | 62 | 3000 | 40 | 0 | 170 | 0 | 520 | 1590 | 560 | 120 | 210 | 0 | 63 | 3 | 62 | 2 | 51 | 2 | 67 | 1 | 52 | 1 | | | | | | | | | | |
| 8 | 20 | 62 | 600 | 0 | 0 | 40 | 0 | 150 | 230 | 120 | 80 | 0 | 40 | 63 | 1 | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 4100 | 1450 | 0 | 350 | 0 | 1660 | 100 | 370 | 120 | 80 | 40 | 51 | 4 | 3 | 4 | 68 | 1 | 67 | 1 | 40 | 1 | | | | | | | | | | |
| 9 | 17 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 10 | 30 | 10 | | | | | | | | | | | | | | | | | | | | |

**MINOR BASIN** NEW JERSEY-N.Y. METROPOLITAN AREA

**STATION LOCATION** RARITAN RIVER AT

PERTH AMBOY, NEW JERSEY 123A

/FIVE FEET BELOW SURFACE/

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 8 | 6 | 62 | 20 | 18 | 10 | 6 | 82 | 5 | 97 | 5 | 66 | 0 | 0 | 140 | 4 | 4 | 21 | 4 | | | | | | | 55 | 50 | 5 | 76 | 1 | | | 1 | 0 |
| 8 | 20 | 62 | 20 | 14 | 97 | 7 | 97 | 7 | 65 | 6 | 66 | 0 | 0 | 90 | 2 | 4 | 21 | 3 | 17 | 1 | 16 | 1 | | | 33 | 50 | 4 | | | | | 0 | 0 |
| 9 | 4 | 62 | 18 | 17 | 75 | 14 | 27 | 13 | 3 | 10 | 46 | 0 | 0 | 18 | 21 | 2 | 2 | 1 | | | | | | | 417 | 50 | 5 | 76 | 3 | 77 | 1 | 0 | 0 |
| 9 | 17 | 62 | 20 | 41 | 20 | 25 | 18 | 6 | 26 | 3 | 25 | 0 | 0 | 0 | | | | | | | | | | | 96 | 50 | 5 | 77 | 2 | | | 0 | 1 |

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**MINOR BASIN** NEW JERSEY-N.Y. METROPOLITAN AREA
**STATION LOCATION** RARITAN RIVER AT
PERTH AMBOY, NEW JERSEY 123A
/FIVE FEET BELOW SURFACE/

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 8 | 20 | 62 | 8 | 27 | 4495# | 1697 | 92 | *1605 | 1 | 10 | 44 | 4 | 4 | 33 | 3 | 15 | 5 | 2 | 15 |
| 9 | 26 | 62 | 10 | 1 | 3283 | 3315 | 178 | *3137 | 5 | 39 | 66 | 5 | 5 | 52 | 4 | 23 | 14 | 4 | 27 |

*SALT CONTENT OF ALCOHOL EXTRACTABLES IN EXCESS OF:
1,000 PPB FOR 8 20 62 AND
1,936 PPB FOR 9 26 62

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE NEW JERSEY
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN NEW JERSEY-N.Y. METROPOLITAN AREA
STATION LOCATION RARITAN RIVER AT
PERTH AMBOY, NEW JERSEY 123A
/FIVE FEET BELOW SURFACE/

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 21 | 62 | 23.3 | 4.6 | 7.3 | - | - | 10.1 | - | - | 10200 | 82 | - | - | - | - | - | - | - |
| 6 | 27 | 62 | 23.3 | 5.3 | 7.3 | - | - | 1.8 | 14.0 | - | 10500 | 74 | - | - | - | - | - | - | - |
| 7 | 6 | 62 | 23.4 | 7.7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 20 | 62 | 24.6 | 4.2 | 7.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 26 | 62 | 23.7 | 3.3 | 5.9 | 1.2 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 6 | 62 | 25.3 | 5.4 | 7.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 13 | 62 | 23.2 | 3.4 | 6.0 | - | - | - | - | - | 8080 | 68 | 2850 | - | - | - | - | - | - |
| 8 | 20 | 62 | 24.9 | 3.1 | 6.8 | - | - | 11.4 | 15.7 | - | 12447 | 89 | 3914 | - | - | - | - | 25688 | - |
| 8 | 27 | 62 | 25.5 | 3.4 | 7.4 | 4.0 | 120 | 10.9 | 14.5 | - | 10600 | 78 | 3500 | - | - | - | - | 22508 | 720 |
| 9 | 4 | 62 | 24.9 | 2.8 | 6.8 | 2.5 | - | 7.3 | 14.5 | - | 11500 | 85 | 4024 | - | - | - | - | 23850 | 220 |
| 9 | 10 | 62 | 23.3 | 5.8 | 7.1 | 3.9 | - | 11.4 | 16.1 | - | 8970 | 88 | 3124 | - | - | - | - | 18600 | 900 |
| 9 | 17 | 62 | - | 2.1 | 6.8 | 1.8 | - | 13.1 | 16.6 | - | 13020 | - | 3980 | - | - | - | - | 25800 | 870 |
| 9 | 24 | 62 | - | 3.4 | - | 1.4 | - | 13.4 | 17.3 | - | 12570 | - | 3900 | - | - | - | - | 26100 | 340 |

**MINOR BASIN** NEW JERSEY-N.Y. METROPOLITAN AREA

**STATION LOCATION** RARITAN RIVER AT

PERTH AMBOY, NEW JERSEY 123B

/FIVE FEET ABOVE BOTTOM/

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 21 | 62 | 22.8 | 4.1 | 7.3 | - | - | 8.8 | - | - | 11100 | 88 | - | - | - | - | - | - | - |
| 6 | 27 | 62 | 22.8 | 5.2 | 7.4 | - | - | 2.2 | 13.6 | - | 13300 | 91 | - | - | - | - | - | - | - |
| 7 | 6 | 62 | 23.1 | 6.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 20 | 62 | 24.9 | 3.8 | 6.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 26 | 62 | 23.6 | 3.1 | 6.3 | 1.2 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 6 | 62 | 24.4 | 3.7 | 6.9 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 13 | 62 | 22.4 | 2.4 | 6.4 | - | - | - | - | - | 12400 | 85 | 4354 | - | - | - | - | - | - |
| 8 | 20 | 62 | 24.0 | 2.5 | 7.0 | - | - | 11.3 | 17.0 | - | 12640 | 88 | 4076 | - | - | - | - | 28484 | - |
| 8 | 27 | 62 | 24.7 | 2.6 | 7.4 | 2.0 | - | 9.9 | 14.7 | - | 11900 | 86 | 3874 | - | - | - | - | 25204 | 340 |
| 9 | 4 | 62 | 24.8 | 2.1 | 6.9 | 1.8 | - | 5.3 | 14.3 | - | 12500 | 92 | 4316 | - | - | - | - | 25740 | 350 |
| 9 | 10 | 62 | 23.1 | 4.9 | 7.0 | 1.8 | - | 11.2 | 15.1 | - | 11610 | 76 | 3986 | - | - | - | - | 23900 | 1100 |
| 9 | 17 | 62 | - | 1.8 | 6.8 | 1.7 | - | 13.0 | 16.8 | - | 13100 | - | 4120 | - | - | - | - | 25800 | 1300 |
| 9 | 24 | 62 | - | 3.2 | - | 1.4 | - | 13.7 | 18.6 | - | 13290 | - | 4180 | - | - | - | - | 27100 | 90 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Bound Brook, New Jersey
Operated by U.S. Geological Survey

MAJOR BASIN North Atlantic

MINOR BASIN New Jersey-New York Metropolitan Area

STATION LOCATION Raritan River at
Perth Amboy, New Jersey

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .177 | .185 | .260 | .491 | .380 | 6.170 | 5.990 | .943 | .257 | .210 | .130 | .227 |
| 2 | .171 | .174 | .252 | .465 | .353 | 2.710 | 6.310 | .800 | .244 | .189 | .115 | .284 |
| 3 | .256 | .163 | .238 | .405 | .366 | 1.760 | 2.880 | 1.860 | .209 | .149 | .110 | .452 |
| 4 | .282 | .153 | .240 | .396 | .382 | 1.320 | 1.980 | 1.270 | .182 | .143 | .105 | .329 |
| 5 | .245 | .181 | .238 | .372 | .455 | 1.200 | 1.600 | .924 | .190 | .134 | .102 | .340 |
| 6 | .224 | .181 | .232 | 1.670 | .534 | 1.260 | 1.340 | .789 | .399 | .122 | .138 | .379 |
| 7 | .221 | .213 | .231 | 13.200 | .404 | 1.330 | 2.910 | .689 | .387 | .126 | .221 | .308 |
| 8 | .217 | .262 | .200 | 8.230 | .334 | 1.560 | 6.120 | .606 | .257 | .122 | .575 | .247 |
| 9 | .210 | .235 | .180 | 3.630 | .359 | 1.680 | 3.700 | .610 | .226 | .119 | .312 | .209 |
| 10 | .201 | .220 | .228 | 1.900 | .382 | 1.640 | 4.220 | .541 | .197 | .100 | .625 | .183 |
| 11 | .186 | .191 | .248 | 1.160 | .260 | 2.230 | 2.680 | .489 | .178 | .082 | 1.010 | .192 |
| 12 | .174 | .185 | .382 | .948 | .286 | 8.620 | 2.520 | .465 | .239 | .088 | .515 | .207 |
| 13 | .182 | .190 | .801 | .829 | .292 | 14.600 | 4.410 | .439 | .461 | .082 | .333 | .165 |
| 14 | .220 | .205 | .580 | .707 | .314 | 6.100 | 3.220 | .418 | .581 | .088 | .293 | .132 |
| 15 | .307 | .304 | .411 | .853 | .346 | 3.290 | 2.460 | .396 | .371 | .090 | .238 | .125 |
| 16 | .284 | .310 | .305 | 1.790 | .346 | 2.450 | 2.300 | .387 | .364 | .091 | .187 | .124 |
| 17 | .232 | .402 | .361 | 1.050 | .359 | 2.030 | 1.840 | .371 | .315 | .092 | .176 | .144 |
| 18 | .208 | .411 | 1.670 | .689 | .369 | 1.680 | 1.540 | .359 | .262 | .099 | .239 | .225 |
| 19 | .199 | .324 | 3.340 | .657 | .474 | 1.430 | 1.340 | .339 | .235 | .123 | .212 | .229 |
| 20 | .191 | .314 | 2.270 | .658 | .656 | 1.300 | 1.200 | .328 | .420 | .152 | .172 | .200 |
| 21 | .187 | .334 | 1.560 | .507 | .612 | 1.460 | 1.080 | .299 | .258 | .125 | .192 | .171 |
| 22 | .222 | .288 | 1.130 | .597 | .630 | 4.050 | .970 | .285 | .232 | .134 | .234 | .148 |
| 23 | .216 | .291 | .847 | .658 | .901 | 2.230 | .902 | .263 | .217 | .294 | .200 | .154 |
| 24 | .207 | .469 | .782 | .516 | 7.420 | 1.780 | .813 | .361 | .320 | 1.510 | .154 | .129 |
| 25 | .196 | .894 | .693 | .555 | 5.560 | 1.470 | .751 | .762 | .435 | .507 | .140 | .119 |
| 26 | .188 | .541 | .653 | .505 | 6.700 | 1.220 | .706 | .433 | .387 | .299 | .139 | .116 |
| 27 | .187 | .405 | .564 | .654 | 11.200 | 1.110 | .674 | .310 | .334 | .217 | .140 | .227 |
| 28 | .177 | .346 | .678 | .600 | 10.100 | .998 | .626 | .272 | .278 | .185 | 1.920 | .738 |
| 29 | .175 | .308 | .626 | .430 |  | .901 | .617 | .259 | .248 | .154 | .847 | .657 |
| 30 | .185 | .273 | .511 | .513 |  | .842 | .737 | .251 | .221 | .144 | .383 | .402 |
| 31 | .221 |  | .508 | .281 |  | .809 |  | .253 |  | .133 | .263 |  |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** NORTH DAKOTA
**MAJOR BASIN** UPPER MISSISSIPPI RIVER
**MINOR BASIN** RED RIVER OF THE NORTH
**STATION LOCATION** RED RIVER AT
GRAND FORKS, NORTH DAKOTA

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 10 | 61 | 39600 | 90 | 0 | 4350 | 0 | 340 | 160 | 33440 | 1210 | 11550 | 90 | 71 | 8 | 38 | 4 | 92 | 3 | 89 | 2 | 25 | 2 | 57 | 2 | 27 | 1 | 60 | 1 | | | | |
| 11 | 9 | 61 | 103600 | 20 | 310 | 850 | 0 | 290 | 0 | 101000 | 1160 | 1240 | 80 | 71 | 9 | 92 | 3 | 17 | 2 | 25 | 1 | 38 | 1 | 51 | 1 | 69 | 1 | | | | | | |
| 12 | 5 | 61 | 24100 | 0 | 0 | 210 | 0 | 580 | 0 | 23140 | 210 | 250 | 40 | 71 | 8 | 57 | 1 | 51 | 1 | 38 | 1 | | | | | | | | | | | | |
| 5 | 9 | 62 | 22600 | 130 | 80 | 2070 | 80 | 420 | 0 | 15990 | 3840 | 6160 | 930 | 71 | 7 | 92 | 4 | 69 | 4 | 38 | 3 | 77 | 3 | 88 | 2 | 51 | 2 | 24 | 2 | 89 | 1 | 30 | 1 |

MINOR BASIN RED RIVER OF THE NORTH

STATION LOCATION RED RIVER AT

GRAND FORKS, NORTH DAKOTA 069

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 10 | 61 | 82 | 88 | 58 | 4 | 56 | 2 | 89 | 2 | 4 | 0 | 0 | 39 | 11 | 3 | | | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 11 | 9 | 61 | 82 | 89 | 89 | 9 | | 1 | | 1 | | 0 | 0 | 9 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 12 | 5 | 61 | 82 | 91 | 89 | 7 | | 1 | | 1 | | 0 | 0 | 32 | 21 | 2 | 11 | 1 | | | | | | | 2 | | | | | | | 1 | 0 |
| 5 | 9 | 62 | 56 | 34 | 82 | 28 | 58 | 16 | 92 | 8 | 14 | 40 | 0 | 87 | 21 | 3 | 11 | 3 | 2 | 2 | 17 | 1 | | | 22 | 76 | 3 | 50 | 1 | | | 0 | 1 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** NORTH DAKOTA
**MAJOR BASIN** UPPER MISSISSIPPI RIVER
**MINOR BASIN** RED RIVER OF THE NORTH
**STATION LOCATION** RED RIVER AT
GRAND FORKS, NORTH DAKOTA

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 10 | 61 | 11 | 1 | 0 | 1 | 3 | 3 | 3 | 3 | 21 | 9 | 28 | 11 | 49 | 14 | | | | | | |
| 11 | 1 | 61 | 11 | 17 | – | – | – | – | – | – | 16 | 11 | 56 | 14 | 72 | 18 | | | | | | |
| 11 | 9 | 61 | 11 | 22 | – | – | – | – | – | – | 14 | 8 | 39 | 11 | 53 | 14 | | | | | | |
| 11 | 15 | 61 | 11 | 28 | 1 | 1 | 2 | 2 | 3 | 2 | 5 | 10 | 54 | 15 | 59 | 18 | | | | | | |
| 5 | 9 | 62 | 6 | 20 | – | – | – | – | – | – | 14 | 14 | 67 | 19 | 81 | 24 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** NORTH DAKOTA
**MAJOR BASIN** UPPER MISSISSIPPI RIVER
**MINOR BASIN** RED RIVER OF THE NORTH
**STATION LOCATION** RED RIVER AT
GRAND FORKS, NORTH DAKOTA 69

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 10 | 61 | 9.8 | 12.5 | 8.8 | - | 53 | 2.9 | 10.8 | - | 18 | 196 | 240 | 15 | - | 96 | - | 364 | *7 |
| 11 | 1 | 61 | 5.1 | 12.1 | 8.7 | 6.5 | 55 | 4.3 | 12.4 | - | 18 | 224 | 276 | 25 | - | 100 | .6 | 443 | 2600 |
| 11 | 9 | 61 | 2.0 | 15.2 | 8.9 | 7.3 | 64 | 4.2 | 14.6 | - | 18 | 250 | 284 | 25 | - | - | .6 | 433 | - |
| 11 | 15 | 61 | 1.6 | 19.4 | 8.8 | 7.7 | 67 | 4.2 | 12.8 | - | 19 | 280 | 320 | 25 | - | 93 | .8 | 472 | *100 |
| 12 | 5 | 61 | .7 | 12.3 | 8.0 | - | 52 | 1.0 | 16.8 | - | 22 | 308 | 344 | 20 | - | 67 | - | 428 | 650 |
| 5 | 9 | 62 | 12.0 | 8.7 | 8.2 | 4.7 | 66 | 4.9 | 12.9 | - | 12 | 204 | 304 | 25 | - | - | - | 502 | 1000 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Grand Forks, North Dakota
Operated by U.S. Geological Survey

STATE North Dakota

MAJOR BASIN Upper Mississippi River

MINOR BASIN Red River of the North

STATION LOCATION Red River at
Grand Forks, North Dakota

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .425 | .446 | .270 | .200 | .205 | .235 | .650 | 4.720 | 23.200 | 7.400 | 9.550 | 3.000 |
| 2 | .407 | .416 | .295 | .200 | .210 | .235 | .720 | 4.600 | 23.400 | 7.000 | 8.500 | 2.900 |
| 3 | .401 | .425 | .328 | .200 | .205 | .240 | .800 | 4.450 | 22.800 | 6.900 | 7.800 | 2.900 |
| 4 | .392 | .325 | .332 | .205 | .210 | .250 | 1.200 | 4.300 | 21.400 | 7.000 | 7.300 | 2.900 |
| 5 | .392 | .300 | .310 | .215 | .215 | .255 | 2.300 | 4.200 | 19.400 | 8.300 | 6.890 | 2.920 |
| 6 | .395 | .350 | .292 | .210 | .205 | .260 | 4.280 | 4.020 | 17.000 | 9.700 | 6.910 | 2.880 |
| 7 | .371 | .345 | .285 | .210 | .195 | .260 | 6.850 | 3.840 | 14.400 | 11.200 | 6.760 | 2.810 |
| 8 | .365 | .310 | .272 | .210 | .190 | .260 | 9.800 | 3.720 | 12.000 | 13.100 | 6.470 | 2.980 |
| 9 | .374 | .305 | .278 | .210 | .190 | .265 | 11.100 | 3.600 | 11.200 | 15.900 | 6.140 | 3.230 |
| 10 | .374 | .335 | .288 | .200 | .195 | .265 | 11.900 | 3.550 | 14.200 | 18.800 | 5.800 | 3.410 |
| 11 | .479 | .392 | .262 | .190 | .205 | .265 | 12.500 | 3.480 | 18.700 | 20.400 | 5.620 | 3.830 |
| 12 | .617 | .449 | .243 | .185 | .210 | .270 | 12.800 | 3.410 | 23.500 | 21.300 | 5.500 | 4.050 |
| 13 | .838 | .455 | .225 | .185 | .215 | .265 | 13.200 | 3.360 | 26.200 | 21.700 | 5.510 | 4.120 |
| 14 | 1.110 | .410 | .207 | .185 | .215 | .260 | 13.700 | 3.380 | 27.200 | 21.800 | 5.740 | 4.100 |
| 15 | 1.150 | .404 | .192 | .185 | .225 | .255 | 13.900 | 3.440 | 27.500 | 21.600 | 6.220 | 4.070 |
| 16 | .951 | .482 | .182 | .185 | .230 | .250 | 14.400 | 3.770 | 27.500 | 20.300 | 6.700 | 3.970 |
| 17 | .782 | .500 | .177 | .180 | .220 | .250 | 16.200 | 4.500 | 26.000 | 19.200 | 7.000 | 3.810 |
| 18 | .708 | .425 | .175 | .175 | .210 | .245 | 17.500 | 6.140 | 24.300 | 17.800 | 7.050 | 3.620 |
| 19 | .687 | .350 | .184 | .170 | .210 | .250 | 17.800 | 7.900 | 23.400 | 16.900 | 6.830 | 3.420 |
| 20 | .690 | .335 | .182 | .165 | .210 | .265 | 18.000 | 9.300 | 22.900 | 15.500 | 6.430 | 3.250 |
| 21 | .642 | .383 | .184 | .165 | .215 | .280 | 18.000 | 10.800 | 22.100 | 13.800 | 5.950 | 3.150 |
| 22 | .614 | .449 | .188 | .165 | .225 | .300 | 17.400 | 12.000 | 21.200 | 16.500 | 5.510 | 3.060 |
| 23 | .560 | .473 | .188 | .170 | .225 | .320 | 16.400 | 12.900 | 20.000 | 11.600 | 5.150 | 2.970 |
| 24 | .530 | .434 | .188 | .175 | .230 | .340 | 15.200 | 14.500 | 18.700 | 12.700 | 4.840 | 2.920 |
| 25 | .512 | .401 | .194 | .180 | .230 | .360 | 13.500 | 18.600 | 17.200 | 11.800 | 4.550 | 2.860 |
| 26 | .494 | .383 | .203 | .185 | .230 | .390 | 11.600 | 22.400 | 15.500 | 12.200 | 4.280 | 2.830 |
| 27 | .482 | .338 | .203 | .185 | .230 | .420 | 9.500 | 24.000 | 13.100 | 12.400 | 4.000 | 2.800 |
| 28 | .467 | .280 | .201 | .185 | .235 | .510 | 7.650 | 24.500 | 11.300 | 12.600 | 3.710 | 2.780 |
| 29 | .464 | .330 | .200 | .190 |  | .560 | 6.200 | 24.600 | 10.000 | 12.200 | 3.420 | 2.760 |
| 30 | .458 | .305 | .200 | .195 |  | .550 | 5.200 | 24.400 | 8.300 | 11.600 | 3.240 | 2.740 |
| 31 | .446 |  | .200 | .200 |  | .600 |  | 23.400 |  | 11.000 | 3.110 |  |

## NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** LOUISIANA
**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER
**MINOR BASIN** LOWER RED RIVER BELOW DENISON
**STATION LOCATION** RED RIVER AT
ALEXANDRIA, LOUISIANA 42

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 28.0 | 6.9 | 7.6 | 1.8 | 22 | 2.1 | 7.1 | .1 | 153 | 80 | 184 | 30 | 320 | 95 | .2 | 529 | - |
| 10 | 9 | 61 | - | 7.2 | 7.6 | 1.4 | 22 | 2.8 | 8.1 | .1 | 115 | 64 | 133 | 30 | 142 | 60 | .3 | 399 | 4000 |
| 10 | 16 | 61 | 22.0 | 7.8 | 7.3 | 1.1 | 19 | 2.9 | 6.1 | .1 | 133 | 62 | 100 | 40 | 142 | 30 | .2 | - | 5500 |
| 10 | 23 | 61 | - | 8.0 | 7.7 | 1.3 | 20 | 2.4 | 6.7 | .1 | 215 | 83 | 236 | 20 | 154 | 139 | .1 | 703 | 17000 |
| 10 | 30 | 61 | 21.0 | 8.5 | 7.7 | 1.4 | 18 | 2.0 | 6.4 | .0 | 292 | 91 | 310 | 10 | 150 | 193 | .2 | 981 | 16000 |
| 11 | 6 | 61 | - | 8.7 | 7.9 | 1.5 | 21 | 2.1 | 7.4 | .0 | 230 | 118 | 281 | 20 | 215 | 140 | .3 | 730 | 9300 |
| 11 | 13 | 61 | 18.0 | 9.1 | 7.7 | - | 19 | 3.0 | 8.0 | .1 | 205 | 117 | 246 | 20 | 135 | 118 | .3 | 716 | 33000 |
| 11 | 27 | 61 | 16.0 | 6.6 | 7.5 | - | 36 | .6 | 8.6 | .2 | 128 | 65 | 146 | 30 | 640 | 60 | .1 | 413 | 39000 |
| 12 | 4 | 61 | - | 8.4 | 7.3 | - | 31 | 3.1 | 10.2 | .2 | 67 | 52 | 101 | 50 | 850 | 36 | .2 | 266 | 20000 |
| 12 | 11 | 61 | 14.0 | 8.6 | 7.5 | - | 28 | 3.6 | 10.4 | .1 | 111 | 53 | 129 | 50 | 700 | 64 | .2 | 391 | 3300 |
| 12 | 18 | 61 | 14.0 | 10.2 | 7.5 | - | 33 | 3.8 | - | .2 | 38 | 44 | 71 | 80 | 570 | 19 | .2 | 166 | 26000 |
| 1 | 8 | 62 | 9.0 | 10.2 | 7.6 | - | 25 | 3.4 | 8.6 | .1 | 49 | 49 | 88 | 50 | 355 | 26 | .2 | 222 | 25000 |
| 1 | 22 | 62 | 9.0 | 11.2 | 7.6 | - | 24 | 3.4 | 8.8 | .1 | 61 | 47 | 99 | 40 | 320 | 34 | .2 | 263 | 10000 |
| 1 | 29 | 62 | 9.0 | 9.6 | 7.5 | 1.0 | 33 | 3.7 | 9.6 | .2 | 48 | 48 | 87 | 60 | 700 | 31 | .2 | 224 | 22000 |
| 2 | 5 | 62 | 13.0 | 8.1 | 7.9 | 1.2 | 30 | 3.6 | 8.0 | .1 | 26 | 43 | 70 | 80 | 810 | 18 | .2 | 148 | 4800 |
| 2 | 12 | 62 | 13.0 | 9.6 | 7.7 | - | 12 | 3.0 | 8.8 | .1 | 46 | 47 | 77 | 60 | 180 | 24 | .2 | 203 | 14000 |
| 2 | 18 | 62 | 16.0 | 8.5 | 7.4 | - | 22 | 2.9 | 8.4 | .1 | 51 | 61 | 97 | 40 | 270 | 29 | .2 | 222 | - |
| 2 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 17000 |
| 2 | 26 | 62 | 19.0 | 8.3 | 7.6 | - | 21 | 3.4 | 9.4 | .2 | 54 | 54 | 95 | 50 | 335 | 31 | .1 | 233 | 11000 |
| 3 | 5 | 62 | 12.0 | 8.8 | 7.7 | - | 31 | 3.5 | 9.6 | .2 | 30 | 47 | 72 | 100 | 600 | 15 | .2 | 148 | 11000 |
| 3 | 12 | 62 | 13.0 | 9.4 | 7.4 | - | 22 | 3.0 | 8.0 | .1 | 34 | 47 | 69 | 60 | 325 | 16 | .2 | 159 | 11000 |
| 3 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 6000 |
| 3 | 23 | 62 | 13.0 | 9.4 | 7.8 | - | 22 | 2.9 | 8.6 | .1 | 35 | 53 | 77 | 50 | 300 | 16 | .2 | 172 | - |
| 3 | 26 | 62 | 17.0 | 8.8 | 7.6 | - | 22 | 3.0 | 9.0 | .2 | 47 | 63 | 88 | 50 | 350 | 23 | .2 | 214 | 11000 |
| 4 | 2 | 62 | 16.0 | 8.6 | 7.7 | - | 22 | 2.7 | 7.7 | .1 | 55 | 64 | 101 | 40 | 510 | 36 | .2 | 238 | 14000 |
| 4 | 9 | 62 | 17.0 | 8.4 | 7.8 | - | 28 | 2.9 | 9.2 | .1 | 29 | 53 | 67 | 60 | 540 | 15 | .1 | 167 | 67000 |
| 4 | 16 | 62 | 20.0 | 7.8 | 7.6 | - | 23 | 3.0 | 8.6 | .1 | 55 | 51 | 88 | 50 | 215 | 30 | .1 | 219 | 6300 |
| 4 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 6000 |
| 4 | 30 | 62 | 24.0 | 6.6 | 7.9 | - | 26 | 3.0 | 8.8 | .2 | 54 | 63 | 97 | 40 | 540 | 29 | .1 | 228 | 15000 |
| 5 | 7 | 62 | 24.0 | 6.1 | 7.7 | - | 26 | 3.8 | 9.6 | .1 | 27 | 51 | 65 | 80 | 325 | 11 | .1 | 141 | 6000 |
| 5 | 14 | 62 | 27.0 | 6.6 | 7.7 | - | 21 | 3.5 | 7.8 | .1 | 40 | 55 | 74 | 50 | 320 | 16 | .1 | 176 | 7000 |
| 5 | 21 | 62 | 29.0 | 6.7 | 7.8 | - | 18 | 3.4 | 7.9 | .1 | 63 | 84 | 122 | 40 | 86 | 35 | .1 | 267 | 2500 |
| 5 | 28 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3500 |
| 6 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3300 |
| 8 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2000 |
| 8 | 27 | 62 | 31.0 | 6.9 | 7.7 | 2.1 | 30 | 3.7 | 9.2 | .2 | 284 | 132 | 362 | 20 | 60 | 181 | .1 | 985 | 2000 |
| 9 | 10 | 62 | 30.0 | 7.3 | 7.9 | 2.6 | 19 | 3.0 | 8.8 | .1 | 273 | 130 | 299 | 30 | 102 | 145 | .1 | 815 | 4300 |
| 9 | 17 | 62 | 30.0 | 4.9 | 7.6 | - | 34 | 2.9 | 7.7 | .1 | 70 | 87 | 136 | 30 | 610 | 50 | .1 | 305 | 2700 |
| 9 | 24 | 62 | 28.0 | 6.5 | 7.8 | - | 23 | 1.9 | 5.8 | .1 | 47 | 87 | 118 | 20 | 490 | 27 | .1 | 249 | 13000 |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** LOWER RED RIVER BELOW DENISON

**STATION LOCATION** RED RIVER AT
ALEXANDRIA, LOUISIANA 42

| DATE SAMPLE TAKEN | | | DATE OF DETERMINATION | | RADIOACTIVITY IN WATER | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 13 | 5 | 5 | 2 | 3 | 7 | 6 | 34 | 14 | 13 | 12 | 47 | 18 | | | | | | |
| 10 | 9 | 61 | 10 | 24 | - | - | - | - | - | - | 5 | 13 | 14 | 13 | 19 | 18 | | | | | | |
| 10 | 16 | 61 | 10 | 30 | - | - | - | - | - | - | 12 | 8 | 8 | 7 | 20 | 11 | | | | | | |
| 10 | 23 | 61 | 11 | 2 | - | - | - | - | - | - | 19 | 25 | 0 | 26 | 19 | 36 | | | | | | |
| 10 | 30 | 61 | 11 | 10 | - | - | - | - | - | - | 0 | 23 | 32 | 32 | 32 | 39 | | | | | | |
| 11 | 6 | 61 | 11 | 16 | 2 | 3 | 0 | 3 | 2 | 4 | 36 | 19 | 38 | 21 | 74 | 28 | | | | | | |
| 11 | 13 | 61 | 11 | 24 | - | - | - | - | - | - | 10 | 23 | 41 | 27 | 51 | 35 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | - | - | - | - | - | - | 17 | 12 | 28 | 14 | 45 | 18 | | | | | | |
| 11 | 27 | 61 | 12 | 7 | - | - | - | - | - | - | 116 | 24 | 22 | 14 | 138 | 28 | | | | | | |
| 12 | 4 | 61 | 12 | 14 | 7 | 4 | 2 | 1 | 9 | 4 | 43 | 9 | 20 | 6 | 63 | 11 | | | | | | |
| 12 | 11 | 61 | 1 | 4 | 19 | 10 | 1 | 2 | 20 | 10 | 172 | 20 | 30 | 10 | 202 | 22 | | | | | | |
| 12 | 18 | 61 | 1 | 5 | - | - | - | - | - | - | 36 | 6 | 35 | 6 | 71 | 8 | | | | | | |
| 1 | 8 | 62 | 1 | 18 | 1 | 1 | 1 | 1 | 2 | 1 | 55 | 7 | 45 | 6 | 100 | 9 | | | | | | |
| 1 | 17 | 62 | 2 | 7 | - | - | - | - | - | - | 37 | 9 | 34 | 8 | 71 | 12 | | | | | | |
| 1 | 22 | 62 | 2 | 2 | - | - | - | - | - | - | 19 | 6 | 43 | 8 | 62 | 10 | | | | | | |
| 1 | 29 | 62 | 2 | 9 | - | - | - | - | - | - | 86 | 13 | 32 | 8 | 118 | 15 | | | | | | |
| 2 | 5 | 62 | 2 | 16 | 6 | 4 | 0 | 1 | 6 | 4 | 108 | 10 | 49 | 6 | 157 | 12 | | | | | | |
| 2 | 12 | 62 | 2 | 23 | - | - | - | - | - | - | 72 | 10 | 29 | 7 | 101 | 12 | | | | | | |
| 2 | 19 | 62 | 3 | 1 | - | - | - | - | - | - | 42 | 7 | 36 | 8 | 78 | 11 | | | | | | |
| 2 | 26 | 62 | 3 | 12 | - | - | - | - | - | - | 58 | 9 | 37 | 8 | 95 | 12 | | | | | | |
| 3 | 5 | 62 | 3 | 19 | 6 | 8 | 0 | 1 | 6 | 8 | 102 | 23 | 39 | 7 | 141 | 24 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | - | - | - | - | - | - | 105 | 12 | 37 | 7 | 142 | 14 | | | | | | |
| 3 | 19 | 62 | 4 | 3 | - | - | - | - | - | - | 101 | 10 | 35 | 6 | 136 | 12 | | | | | | |
| 3 | 26 | 62 | 4 | 11 | - | - | - | - | - | - | 81 | 10 | 34 | 8 | 115 | 13 | | | | | | |
| 4 | 2 | 62 | 4 | 17 | 6 | 5 | 0 | 1 | 6 | 5 | 153 | 20 | 41 | 8 | 194 | 22 | | | | | | |
| 4 | 9 | 62 | 4 | 24 | - | - | - | - | - | - | 175 | 20 | 22 | 7 | 197 | 21 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 96 | 16 | 51 | 8 | 147 | 18 | | | | | | |
| 4 | 23 | 62 | 5 | 28 | - | - | - | - | - | - | 44 | 9 | 25 | 9 | 69 | 13 | | | | | | |
| 4 | 30 | 62 | 6 | 20 | - | - | - | - | - | - | 96 | 22 | 35 | 9 | 131 | 24 | | | | | | |
| 5 | 7 | 62 | 6 | 12 | 11 | 5 | 0 | 1 | 11 | 5 | 121 | 23 | 32 | 9 | 153 | 25 | | | | | | |
| 5 | 14 | 62 | 6 | 22 | - | - | - | - | - | - | 31 | 10 | 31 | 9 | 62 | 13 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | - | - | - | - | - | - | 14 | 10 | 28 | 10 | 42 | 14 | | | | | | |
| 5 | 28 | 62 | 6 | 29 | - | - | - | - | - | - | 3 | 7 | 25 | 8 | 28 | 11 | | | | | | |
| 6 | 4 | 62 | 6 | 7 | 2 | 1 | 1 | 2 | 3 | 2 | 51 | 10 | 49 | 10 | 100 | 14 | | | | | | |
| 6 | 11 | 62 | 7 | 9 | - | - | - | - | - | - | 82 | 36 | 37 | 8 | 119 | 37 | | | | | | |
| 6 | 18 | 62 | 7 | 17 | - | - | - | - | - | - | 128 | 40 | 21 | 26 | 149 | 48 | | | | | | |
| 6 | 25 | 62 | 7 | 23 | - | - | - | - | - | - | 35 | 37 | 48 | 36 | 83 | 52 | | | | | | |
| 7 | 2 | 62 | 9 | 7 | 5 | 4 | 2 | 5 | 7 | 7 | 11 | 33 | 12 | 35 | 23 | 48 | | | | | | |
| 7 | 16 | 62 | 8 | 8 | - | - | - | - | - | - | 4 | 11 | 22 | 16 | 26 | 19 | | | | | | |
| 7 | 23 | 62 | 8 | 9 | - | - | - | - | - | - | 11 | 22 | 44 | 27 | 55 | 35 | | | | | | |
| 7 | 27 | 62 | 8 | 20 | - | - | - | - | - | - | 0 | 11 | 51 | 14 | 51 | 18 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 10 | 62 | 9 | 26 | 0 | 2 | 3 | 4 | 3 | 4 | 12 | 21 | 54 | 29 | 66 | 36 | | | | | | |
| 8 | 13 | 62 | 8 | 29 | 1 | 3 | 0 | 3 | 1 | 4 | 0 | 28 | 112 | 36 | 112 | 46 | | | | | | |
| 8 | 20 | 62 | 9 | 5 | - | - | - | - | - | - | 8 | 19 | 4 | 27 | 12 | 33 | | | | | | |
| 8 | 27 | 62 | 9 | 14 | - | - | - | - | - | - | 9 | 32 | 35 | 43 | 44 | 54 | | | | | | |
| 9 | 17 | 62 | 10 | 10 | 0 | 4 | 1 | 2 | 1 | 4 | 154 | 66 | 20 | 14 | 174 | 67 | | | | | | |
| 9 | 24 | 62 | 10 | 17 | - | - | - | - | - | - | 31 | 16 | 17 | 8 | 48 | 18 | | | | | | |

**STATION LOCATION** RED RIVER AT

ALEXANDRIA, LOUISIANA 42

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 2500 | 40 | 0 | 290 | 0 | 100 | 0 | 1140 | 950 | 230 | 310 | 68 | 3 | 88 | 2 | 71 | 1 | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 2700 | 0 | 0 | 350 | 0 | 310 | 40 | 500 | 1510 | 210 | 460 | 88 | 2 | 83 | 2 | 68 | 1 | 71 | 1 | 35 | 1 | 52 | 1 | 86 | 1 | | | | | | |
| 10 | 31 | 61 | 9300 | 40 | 0 | 5400 | 0 | 290 | 250 | 700 | 2590 | 120 | 500 | 35 | 5 | 83 | 3 | 68 | 2 | 97 | 2 | 86 | 2 | 44 | 2 | 38 | 2 | 65 | 1 | 88 | 1 | 98 | 1 |
| 11 | 14 | 61 | 9200 | 250 | 0 | 2190 | 0 | 1520 | 0 | 1700 | 3540 | 670 | 1210 | 83 | 4 | 68 | 4 | 51 | 3 | 57 | 3 | 27 | 2 | 92 | 2 | 88 | 2 | 38 | 2 | 45 | 2 | 35 | 2 |
| 12 | 1 | 61 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 30 | | | | | | | | | | | | | | | | | | | | |
| 12 | 15 | 61 | 300 | 0 | 0 | 20 | 0 | 40 | 20 | 120 | 120 | 20 | 40 | | | | | | | | | | | | | | | | | | | | |
| 12 | 29 | 61 | 300 | 0 | 0 | 20 | 0 | 110 | 20 | 70 | 70 | 20 | 50 | | | | | | | | | | | | | | | | | | | | |
| 1 | 17 | 62 | 300 | 0 | 0 | 50 | 0 | 50 | 20 | 70 | 90 | 20 | 70 | | | | | | | | | | | | | | | | | | | | |
| 2 | 1 | 62 | 100 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 40 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 2 | 15 | 62 | 1600 | 0 | 0 | 150 | 0 | 310 | 290 | 370 | 460 | 210 | 0 | 51 | 2 | 60 | 1 | 92 | 1 | 84 | 1 | 68 | 1 | | | | | | | | | | |
| 3 | 1 | 62 | 200 | 0 | 0 | 20 | 0 | 40 | 20 | 0 | 100 | 20 | 40 | | | | | | | | | | | | | | | | | | | | |
| 3 | 15 | 62 | 700 | 0 | 0 | 290 | 0 | 60 | 40 | 230 | 80 | 60 | 20 | 33 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 31 | 62 | 700 | 0 | 0 | 70 | 0 | 20 | 0 | 320 | 340 | 20 | 180 | 69 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 700 | 0 | 20 | 320 | 0 | 60 | 0 | 110 | 190 | 150 | 190 | | | | | | | | | | | | | | | | | | | | |
| 5 | 1 | 62 | 500 | 0 | 0 | 40 | 0 | 0 | 0 | 210 | 250 | 40 | 510 | | | | | | | | | | | | | | | | | | | | |
| 5 | 15 | 62 | 4600 | 0 | 0 | 420 | 170 | 110 | 20 | 2450 | 1390 | 420 | 420 | 71 | 4 | 38 | 1 | 35 | 1 | 50 | 1 | 69 | 1 | | | | | | | | | | |
| 6 | 1 | 62 | 3900 | 0 | 40 | 130 | 110 | 0 | 0 | 2030 | 1560 | 1350 | 380 | 68 | 4 | 69 | 1 | 71 | 1 | | | | | | | | | | | | | | |
| 6 | 14 | 62 | 800 | 0 | 0 | 40 | 0 | 120 | 20 | 350 | 270 | 80 | 150 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 6 | 28 | 62 | 1100 | 80 | 0 | 150 | 0 | 330 | 20 | 100 | 440 | 20 | 40 | 57 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 13 | 62 | 7200 | 80 | 210 | 720 | 0 | 340 | 0 | 3460 | 2360 | 510 | 1060 | 68 | 4 | 88 | 4 | 92 | 2 | 71 | 1 | 52 | 1 | 17 | 1 | 38 | 1 | 69 | 1 | | | | |
| 8 | 13 | 62 | 102500 | 80380 | 190 | 5200 | 210 | 270 | 80 | 3310 | 12830 | 410 | 620 | 4 | 9 | 92 | 6 | 2 | 5 | 83 | 5 | 44 | 4 | 67 | 4 | 88 | 4 | 68 | 3 | 38 | 2 | 35 | 2 |
| 8 | 15 | 62 | 60700 | 1660 | 38790 | 7990 | 0 | 1780 | 120 | 3350 | 6960 | 1490 | 750 | 22 | 9 | 83 | 5 | 35 | 5 | 25 | 4 | 51 | 4 | 67 | 4 | 92 | 4 | 88 | 4 | 68 | 3 | 3 | 3 |
| 8 | 31 | 62 | 13400 | 0 | 2030 | 1760 | 0 | 680 | 0 | 730 | 8200 | 120 | 370 | 88 | 5 | 17 | 4 | 87 | 3 | 86 | 3 | 83 | 3 | 25 | 3 | 51 | 3 | 67 | 2 | 11 | 2 | 92 | 2 |
| 9 | 14 | 62 | 220400 | 340 | * | 1730 | 0 | 340 | 0 | 970 | 3670 | 510 | 1310 | 16 | 9 | 83 | 4 | 87 | 4 | 88 | 3 | 67 | 3 | 26 | 2 | 38 | 2 | 40 | 1 | 51 | 1 | 86 | 1 |
| 9 | 28 | 62 | 4400 | 180 | 20 | 1170 | 0 | 270 | 0 | 1800 | 920 | 790 | 290 | 68 | 4 | 88 | 2 | 26 | 1 | 25 | 1 | 35 | 1 | 51 | 1 | 3 | 1 | 71 | 1 | 87 | 1 | | |
| *9 | 14 | 62 | | | 213320 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 26 | 54 | 68 | 8 | 58 | 5 | 56 | 4 | 29 | 0 | 0 | 1 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 38 | 14 | 58 | 11 | 68 | 9 | 26 | 6 | 60 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 31 | 61 | 38 | 21 | 97 | 12 | 54 | 9 | 26 | 8 | 50 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 14 | 61 | 38 | 30 | 26 | 19 | 92 | 6 | 23 | 4 | 41 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 1 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 15 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 29 | 61 | | | | | | | | | | 180 | 0 | 2 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 1 | 17 | 62 | 47 | 60 | 92 | 9 | 80 | 5 | 79 | 3 | 23 | 90 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 1 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 15 | 62 | | | | | | | | | | 170 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 1 | 62 | | | | | | | | | | 60 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 15 | 62 | 92 | 18 | 62 | 8 | 26 | 3 | 52 | 2 | 69 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 31 | 62 | 92 | 23 | 56 | 13 | 43 | 8 | 80 | 5 | 51 | 20 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 92 | 19 | 58 | 11 | 71 | 7 | 36 | 5 | 68 | 0 | 10 | 0 | | | | | | | | | | | 7 | 76 | 2 | | | | | 0 | 0 |
| 5 | 1 | 62 | 92 | 23 | 9 | 14 | 13 | 5 | 71 | 5 | 53 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 15 | 62 | 80 | 74 | 58 | 18 | 56 | 4 | 57 | 1 | 3 | 20 | 0 | 2 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 6 | 1 | 62 | 56 | 43 | 58 | 33 | 29 | 16 | 92 | 2 | 6 | 0 | 0 | 12 | 8 | 1 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 6 | 14 | 62 | 26 | 25 | 58 | 18 | 56 | 12 | 80 | 6 | 39 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 28 | 62 | 58 | 13 | 26 | 9 | 92 | 7 | 73 | 6 | 65 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 13 | 62 | 56 | 38 | 58 | 34 | 26 | 12 | 68 | 3 | 13 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 13 | 62 | 18 | 30 | 91 | 27 | 26 | 16 | 82 | 4 | 23 | 0 | 0 | 2600 | 11 | 8 | 22 | 8 | 17 | 7 | 7 | 6 | 15 | 5 | 60 | 50 | 5 | | | | | 0 | 0 |
| 8 | 15 | 62 | 18 | 30 | 36 | 26 | 26 | 23 | 91 | 8 | 13 | 0 | 0 | 1100 | 11 | 7 | 22 | 6 | 17 | 6 | 7 | 5 | 2 | 2 | 3 | 50 | 1 | | | | | 0 | 0 |
| 8 | 31 | 62 | 18 | 49 | 26 | 21 | 68 | 10 | 38 | 3 | 17 | 0 | 0 | 99 | 11 | 4 | 17 | 3 | 15 | 1 | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 14 | 62 | 18 | 52 | 26 | 17 | 56 | 7 | 38 | 6 | 18 | 0 | 0 | 518 | 11 | 7 | 2 | 4 | 17 | 2 | 16 | 1 | 15 | 1 | 6 | 50 | 2 | | | | | 0 | 3 |
| 9 | 28 | 62 | 26 | 49 | 18 | 19 | 82 | 6 | 68 | 5 | 21 | 0 | 0 | 64 | 11 | 3 | 2 | 3 | 17 | 1 | | | | | 0 | | | | | | | 0 | 0 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Alexandria, Louisiana
Operated by U.S. Army Corps of Engineers

| | |
|---|---|
| STATE | Louisiana |
| MAJOR BASIN | Southwest-Lower Mississippi River |
| MINOR BASIN | Lower Red River below Denison |
| STATION LOCATION | Red River At<br>Alexandria, Louisiana |

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 9.500 | 9.100 | 76.900 | 51.600 | 92.500 | 74.800 | 44.600 | 77.600 | 10.700 | 29.800 | 7.000 | 6.100 |
| 2 | 9.100 | 8.600 | 69.100 | 48.900 | 92.000 | 78.800 | 45.100 | 88.900 | 10.900 | 27.400 | 6.900 | 6.200 |
| 3 | 9.900 | 8.600 | 61.800 | 46.900 | 89.800 | 78.000 | 44.900 | 93.900 | 9.900 | 24.000 | 6.700 | 6.300 |
| 4 | 14.200 | 8.700 | 53.800 | 46.200 | 85.100 | 74.400 | 41.500 | 92.600 | 9.800 | 21.200 | 6.800 | 6.200 |
| 5 | 18.500 | 8.900 | 47.400 | 46.500 | 80.200 | 72.300 | 50.400 | 85.300 | 10.000 | 19.800 | 6.900 | 6.100 |
| 6 | 21.300 | 9.100 | 42.200 | 46.700 | 74.500 | 69.500 | 53.800 | 72.200 | 10.000 | 19.200 | 6.900 | 6.000 |
| 7 | 22.500 | 9.100 | 39.100 | 45.200 | 69.100 | 66.500 | 53.000 | 69.600 | 10.300 | 19.800 | 7.000 | 6.000 |
| 8 | 23.100 | 8.900 | 37.600 | 43.200 | 63.200 | 62.800 | 49.500 | 62.800 | 15.100 | 20.000 | 6.900 | 7.200 |
| 9 | 23.100 | 8.600 | 38.400 | 41.100 | 57.900 | 58.500 | 45.600 | 55.500 | 24.400 | 18.800 | 6.900 | 8.700 |
| 10 | 22.800 | 8.300 | 45.400 | 39.400 | 52.700 | 54.700 | 43.600 | 48.400 | 25.400 | 16.400 | 7.300 | 9.300 |
| 11 | 22.500 | 8.700 | 58.500 | 37.900 | 48.500 | 52.000 | 38.500 | 41.300 | 22.500 | 14.300 | 8.000 | 9.700 |
| 12 | 21.300 | 9.900 | 76.900 | 37.100 | 45.100 | 47.800 | 39.000 | 36.200 | 21.100 | 13.200 | 8.400 | 9.900 |
| 13 | 20.200 | 11.800 | 95.800 | 36.100 | 41.600 | 48.800 | 43.000 | 32.500 | 22.600 | 13.000 | 8.100 | 13.000 |
| 14 | 18.000 | 14.000 | 103.000 | 35.400 | 38.700 | 50.700 | 45.400 | 29.700 | 30.900 | 12.700 | 7.500 | 24.300 |
| 15 | 16.400 | 14.200 | 108.000 | 35.200 | 37.200 | 52.400 | 43.900 | 26.800 | 39.200 | 12.500 | 6.600 | 28.800 |
| 16 | 14.500 | 13.500 | 109.000 | 39.400 | 35.600 | 51.800 | 40.800 | 24.500 | 50.500 | 12.000 | 6.200 | 26.800 |
| 17 | 13.200 | 12.800 | 110.000 | 44.600 | 34.300 | 48.800 | 36.600 | 22.900 | 57.400 | 11.200 | 6.000 | 22.700 |
| 18 | 12.300 | 12.300 | 113.000 | 49.200 | 33.600 | 47.100 | 32.300 | 21.600 | 57.300 | 10.300 | 6.000 | 19.300 |
| 19 | 13.000 | 11.800 | 112.000 | 53.800 | 36.000 | 41.500 | 30.100 | 20.500 | 54.200 | 9.800 | 6.100 | 16.000 |
| 20 | 15.000 | 11.400 | 112.000 | 56.600 | 42.400 | 37.900 | 28.200 | 19.600 | 49.700 | 9.700 | 6.200 | 13.700 |
| 21 | 19.100 | 11.200 | 112.000 | 57.100 | 46.100 | 35.900 | 26.600 | 18.800 | 42.400 | 9.600 | 6.100 | 12.200 |
| 22 | 19.300 | 12.300 | 108.000 | 55.900 | 47.600 | 34.100 | 26.000 | 17.800 | 42.200 | 9.200 | 6.000 | 11.400 |
| 23 | 18.000 | 17.700 | 107.000 | 54.300 | 46.900 | 33.000 | 28.700 | 16.600 | 38.200 | 8.800 | 5.800 | 11.200 |
| 24 | 16.100 | 25.600 | 101.000 | 54.300 | 45.700 | 31.500 | 30.600 | 15.500 | 36.600 | 8.300 | 5.700 | 10.800 |
| 25 | 14.700 | 34.700 | 93.400 | 55.900 | 45.700 | 30.100 | 31.500 | 14.300 | 35.100 | 7.800 | 5.700 | 10.500 |
| 26 | 13.700 | 43.800 | 85.600 | 59.900 | 48.500 | 30.000 | 34.200 | 13.200 | 32.900 | 7.200 | 6.000 | 10.100 |
| 27 | 13.500 | 58.500 | 78.400 | 67.700 | 55.000 | 31.000 | 36.900 | 12.300 | 30.500 | 6.700 | 6.000 | 10.000 |
| 28 | 13.200 | 72.200 | 71.700 | 77.200 | 64.800 | 31.200 | 43.700 | 11.600 | 28.900 | 6.800 | 6.000 | 10.300 |
| 29 | 12.300 | 80.200 | 65.400 | 82.800 |  | 31.000 | 61.800 | 11.000 | 28.500 | 7.100 | 6.200 | 10.600 |
| 30 | 11.400 | 83.500 | 60.000 | 87.700 |  | 34.400 | 70.000 | 10.500 | 29.700 | 7.500 | 6.400 | 12.100 |
| 31 | 10.100 |  | 55.300 | 92.800 |  | 40.300 |  | 10.300 |  | 7.500 | 6.100 |  |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 6 | 18 | 62 | 7 | 17 | 32 | 15 | 4 | 5 | 36 | 16 | 74 | 41 | 25 | 32 | 99 | 52 | | | | | | |
| 6 | 26 | 62 | 7 | 24 | 11 | 7 | 7 | 5 | 18 | 9 | 62 | 33 | 31 | 28 | 93 | 43 | | | | | | |
| 7 | 3 | 62 | 7 | 31 | 2 | 4 | 1 | 5 | 3 | 6 | 45 | 31 | 53 | 32 | 98 | 45 | | | | | | |
| 7 | 12 | 62 | 8 | 14 | 0 | 1 | 0 | 1 | 0 | 1 | 38 | 25 | 36 | 27 | 74 | 37 | | | | | | |
| 7 | 24 | 62 | 8 | 9 | 0 | 5 | 1 | 5 | 1 | 7 | 0 | 29 | 49 | 33 | 49 | 44 | | | | | | |
| 7 | 31 | 62 | 8 | 17 | 1 | 2 | 3 | 4 | 4 | 4 | 17 | 21 | 27 | 28 | 44 | 35 | | | | | | |
| 8 | 7 | 62 | 8 | 28 | 1 | 2 | 3 | 4 | 4 | 4 | 0 | 45 | 53 | 26 | 53 | 47 | | | | | | |
| 8 | 14 | 62 | 8 | 31 | 1 | 2 | 0 | 1 | 1 | 2 | 21 | 13 | 87 | 17 | 108 | 21 | | | | | | |
| 8 | 21 | 62 | 10 | 12 | 0 | 6 | 1 | 8 | 1 | 10 | 48 | 53 | 82 | 62 | 130 | 82 | | | | | | |
| 9 | 4 | 62 | 9 | 21 | 2 | 3 | 3 | 5 | 5 | 6 | 18 | 44 | 61 | 33 | 79 | 55 | | | | | | |
| 9 | 11 | 62 | 10 | 6 | 5 | 3 | 1 | 3 | 6 | 4 | 19 | 26 | 479 | 38 | 498 | 46 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** LOUISIANA
**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER
**MINOR BASIN** LOWER RED RIVER BELOW DENISON
**STATION LOCATION** RED RIVER AT
BOSSIER CITY, LOUISIANA 118

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 6 | 18 | 62 | 500 | 0 | 0 | 80 | 0 | 60 | 0 | 150 | 250 | | 20 | 60 | | | | | | | | | | | | | | | | | | | | |
| 7 | 3 | 62 | 7200 | 80 | 0 | 1430 | 80 | 460 | 100 | 410 | 4580 | | 290 | 250 | 88 | 4 | 38 | 2 | 51 | 2 | 25 | 2 | 35 | 1 | 71 | 1 | 84 | 1 | 92 | 1 | | | | |
| 7 | 17 | 62 | 13500 | 590 | 0 | 2030 | 250 | 210 | 130 | 7640 | 2660 | | 2620 | 1060 | 67 | 6 | 92 | 3 | 86 | 3 | 88 | 3 | 69 | 2 | 40 | 2 | 38 | 2 | 25 | 2 | 2 | 2 | 35 | 1 |
| 7 | 31 | 62 | 11500 | 990 | 950 | 2940 | 80 | 1010 | 60 | 1950 | 3520 | | 460 | 210 | 83 | 4 | 3 | 3 | 67 | 3 | 38 | 3 | 92 | 3 | 51 | 3 | 11 | 3 | 68 | 2 | 88 | 2 | 69 | 2 |
| 8 | 14 | 62 | 9200 | 100 | 20 | 4180 | 0 | 370 | 210 | 1780 | 2480 | | 580 | 330 | 38 | 5 | 83 | 4 | 67 | 3 | 68 | 3 | 87 | 1 | 88 | 1 | 51 | 1 | 63 | 1 | | | | |
| 9 | 11 | 62 | 20500 | 40 | 40 | 1160 | 0 | 420 | 0 | 3330 | 15530 | | 1060 | 2950 | 88 | 6 | 67 | 4 | 38 | 2 | 86 | 2 | 51 | 2 | 69 | 2 | 40 | 1 | 83 | 1 | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

| | |
|---|---|
| **STATE** | LOUISIANA |
| **MAJOR BASIN** | SOUTHWEST-LOWER MISSISSIPPI RIVER |
| **MINOR BASIN** | LOWER RED RIVER BELOW DENISON |
| **STATION LOCATION** | RED RIVER AT<br>BOSSIER CITY, LOUISIANA 118 |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | PROTOZOA (Identifiable) Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 6 | 18 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 3 | 62 | 80 | 14 | 26 | 9 | 58 | 8 | 48 | 7 | 62 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 17 | 62 | 20 | 56 | 56 | 18 | 58 | 15 | 92 | 2 | 9 | 40 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 31 | 62 | 18 | 30 | 38 | 19 | 26 | 18 | 91 | 9 | 24 | 0 | 0 | 566 | 11 | 7 | 17 | 4 | 22 | 3 | 2 | 3 | 15 | 2 | 2 | | | | | | | 0 | 0 |
| 8 | 14 | 62 | 18 | 39 | 26 | 21 | 38 | 17 | 23 | 4 | 19 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 11 | 62 | 18 | 13 | 26 | 10 | 54 | 10 | 58 | 7 | 60 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |

BOSSIER CITY, LOUISIANA 118

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 18 | 62 | - | - | 7.4 | - | - | - | - | - | 267 | 112 | 320 | 5 | 25 | 175 | - | 863 | - |
| 6 | 26 | 62 | - | - | 7.7 | - | - | - | - | - | 201 | 88 | 260 | 10 | 450 | 120 | .0 | 707 | 1000 |
| 7 | 3 | 62 | - | - | - | - | - | - | - | - | 250 | 112 | 288 | 15 | 250 | 165 | .0 | 862 | 500 |
| 7 | 10 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 7 | 17 | 62 | - | - | - | - | - | - | - | - | 175 | 132 | 252 | 5 | 65 | 120 | .0 | 622 | 100 |
| 7 | 24 | 62 | - | - | - | - | - | - | - | - | 285 | 136 | 348 | 0 | 25 | 190 | .0 | 916 | 100 |
| 7 | 31 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 8 | 7 | 62 | - | - | 7.9 | - | - | - | - | - | 209 | 136 | 320 | - | 52 | 125 | .0 | 749 | *100 |
| 8 | 14 | 62 | - | - | - | - | - | - | - | - | 136 | 128 | 228 | 5 | - | 105 | .0 | 563 | *100 |
| 8 | 21 | 62 | - | - | - | - | - | - | - | - | 292 | 144 | 344 | 5 | - | 195 | .0 | 987 | - |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 9 | 11 | 62 | - | - | - | - | - | - | - | - | 206 | 112 | 260 | 5 | 150 | 145 | .0 | 700 | 5000 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Shreveport, Louisiana
Operated by U.S. Geological Survey

MAJOR BASIN Southwest-Lower Mississippi River

MINOR BASIN Lower Red River below Denison

STATION LOCATION Red River at
Bossier City, Louisiana

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.170 | 5.230 | 55.300 | 28.200 | 78.600 | 70.300 | 33.500 | 55.200 | 4.380 | 20.500 | 6.800 | 6.140 |
| 2 | 11.400 | 5.790 | 47.800 | 27.500 | 70.300 | 69.000 | 27.500 | 63.700 | 5.040 | 17.900 | 6.240 | 5.920 |
| 3 | 13.500 | 5.980 | 39.000 | 28.200 | 63.700 | 63.700 | 32.100 | 61.000 | 5.260 | 16.500 | 7.020 | 5.260 |
| 4 | 15.300 | 5.980 | 31.100 | 28.200 | 56.300 | 59.700 | 47.000 | 53.100 | 5.700 | 16.100 | 7.240 | 4.380 |
| 5 | 16.600 | 5.790 | 26.500 | 28.200 | 49.900 | 55.200 | 47.800 | 43.700 | 6.580 | 17.900 | 7.020 | 5.700 |
| 6 | 17.000 | 5.420 | 24.800 | 26.900 | 42.900 | 51.000 | 43.700 | 39.600 | 12.600 | 18.700 | 7.020 | 7.460 |
| 7 | 17.000 | 5.040 | 23.600 | 25.600 | 36.900 | 46.200 | 36.900 | 35.500 | 25.600 | 16.100 | 7.460 | 7.900 |
| 8 | 16.600 | 5.420 | 22.500 | 23.900 | 33.500 | 42.100 | 32.800 | 28.800 | 25.600 | 13.900 | 9.220 | 8.340 |
| 9 | 17.000 | 7.500 | 25.400 | 22.800 | 30.800 | 37.600 | 28.800 | 24.500 | 20.500 | 12.900 | 9.880 | 9.000 |
| 10 | 15.300 | 8.900 | 36.300 | 22.200 | 28.800 | 34.800 | 26.200 | 21.600 | 17.000 | 12.100 | 9.000 | 9.220 |
| 11 | 13.900 | 9.100 | 43.700 | 22.200 | 26.900 | 34.200 | 25.100 | 20.100 | 16.100 | 11.800 | 7.900 | 9.440 |
| 12 | 11.700 | 7.310 | 52.100 | 21.100 | 25.100 | 34.200 | 27.500 | 18.300 | 25.600 | 11.200 | 7.020 | 28.200 |
| 13 | 9.500 | 5,980 | 57.500 | 20.500 | 23.400 | 38.200 | 26.900 | 16.500 | 32.800 | 11.500 | 5.920 | 33.500 |
| 14 | 8.700 | 5.230 | 60.800 | 18.700 | 21.600 | 38.200 | 22.200 | 15.500 | 36.200 | 10.700 | 5.700 | 28.200 |
| 15 | 7.900 | 5.230 | 62.900 | 18.300 | 19.600 | 34.200 | 19.600 | 14.800 | 48.900 | 9.880 | 6.360 | 21.600 |
| 16 | 7.310 | 5.980 | 60.800 | 23.400 | 17.900 | 31.500 | 17.400 | 14.500 | 55.200 | 9.000 | 6.800 | 17.900 |
| 17 | 7.700 | 6.170 | 65.100 | 26.900 | 17.900 | 26.900 | 16.100 | 14.200 | 53.100 | 9.000 | 6.800 | 14.800 |
| 18 | 13.500 | 6.170 | 67.300 | 34.200 | 27.500 | 25.600 | 15.500 | 13.900 | 47.000 | 9.000 | 6.800 | 12.900 |
| 19 | 18.100 | 6.930 | 65.100 | 33.500 | 33.500 | 23.400 | 15.500 | 13.500 | 44.500 | 9.000 | 6.140 | 12.100 |
| 20 | 17.000 | 8.700 | 64.000 | 33.500 | 33.500 | 22.200 | 15.800 | 12.900 | 38.900 | 8.120 | 5.260 | 11.800 |
| 21 | 14.800 | 9.500 | 64.000 | 32.800 | 34.200 | 21.600 | 18.700 | 12.100 | 34.800 | 7.460 | 4.820 | 11.200 |
| 22 | 12.300 | 10.100 | 61.800 | 30.200 | 28.800 | 20.500 | 22.800 | 10.900 | 34.200 | 6.800 | 5.040 | 10.900 |
| 23 | 11.000 | 18.100 | 55.300 | 27.500 | 25.100 | 20.100 | 23.400 | 9.880 | 32.800 | 5.700 | 5.700 | 10.100 |
| 24 | 10.700 | 22.500 | 48.900 | 31.500 | 31.500 | 20.100 | 22.200 | 9.000 | 30.200 | 5.260 | 5.700 | 9.660 |
| 25 | 10.400 | 35.400 | 43.700 | 36.200 | 35.500 | 22.200 | 22.800 | 8.560 | 2.750 | 5.480 | 5.920 | 9.660 |
| 26 | 10.400 | 64.000 | 39.000 | 44.500 | 46.200 | 23.900 | 21.100 | 8.120 | 25.100 | 6.140 | 5.920 | 10.700 |
| 27 | 9.100 | 76.500 | 35.400 | 56.300 | 54.200 | 22.800 | 26.900 | 7.240 | 24.500 | 7.020 | 5.040 | 10.700 |
| 28 | 8.100 | 81.100 | 33.200 | 63.700 | 65.000 | 24.500 | 42.900 | 6.580 | 25.600 | 7.240 | 4.380 | 10.400 |
| 29 | 6.930 | 75.300 | 31.100 | 71.600 |  | 32.800 | 47.800 | 5.480 | 29.500 | 7.460 | 4.380 | 10.100 |
| 30 | 5.980 | 65.100 | 29.600 | 81.300 |  | 36.900 | 47.800 | 5.260 | 25.100 | 6.580 | 5.700 | 9.220 |
| 31 | 5.420 |  | 28.200 | 84.100 |  | 38.200 |  | 4.380 |  | 6.360 | 6.140 |  |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** ARKANSAS

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** LOWER RED RIVER BELOW DENISON

**STATION LOCATION** RED RIVER AT
INDEX, ARKANSAS 43

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 4600 | 410 | 330 | 1020 | 0 | 100 | 0 | 370 | 2400 | | 120 | 440 | 1 | 2 | 87 | 2 | 99 | 2 | 12 | 2 | 25 | 1 | 97 | 1 | 88 | 1 | 35 | 1 | 38 | 1 | 98 | 1 |
| 10 | 16 | 61 | 6200 | 0 | 0 | 1160 | 0 | 130 | 0 | 560 | 4330 | | 100 | 520 | 97 | 3 | 87 | 3 | 35 | 3 | 71 | 2 | 88 | 2 | 98 | 2 | 83 | 2 | 99 | 1 | 92 | 1 | 86 | 1 |
| 11 | 6 | 61 | 11200 | 60 | 0 | 2940 | 0 | 930 | 0 | 2050 | 5240 | | 1490 | 1080 | 83 | 4 | 68 | 4 | 35 | 3 | 38 | 3 | 97 | 3 | 45 | 2 | 71 | 2 | 69 | 2 | 44 | 2 | 98 | 2 |
| 11 | 20 | 61 | 10200 | 0 | 20 | 1350 | 0 | 1240 | 2170 | 2380 | 3040 | | 190 | 520 | 65 | 4 | 51 | 4 | 69 | 3 | 71 | 3 | 97 | 3 | 87 | 2 | 27 | 2 | 38 | 1 | 83 | 1 | 98 | 1 |
| 11 | 29 | 61 | 200 | 0 | 0 | 20 | 0 | 40 | 20 | 20 | 50 | | 20 | 220 | | | | | | | | | | | | | | | | | | | | |
| 12 | 16 | 61 | 600 | 0 | 50 | 50 | 0 | 270 | 0 | 50 | 180 | | 20 | 90 | 51 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 10 | 62 | 8400 | 180 | 90 | 1200 | 0 | 2810 | 70 | 3650 | 410 | | 340 | 0 | 71 | 5 | 57 | 3 | 51 | 3 | 35 | 2 | 25 | 1 | 68 | 1 | | | | | | | | |
| 1 | 25 | 62 | 800 | 20 | 20 | 100 | 0 | 230 | 0 | 120 | 330 | | 20 | 80 | | | | | | | | | | | | | | | | | | | | |
| 2 | 7 | 62 | 6200 | 770 | 0 | 700 | 0 | 1640 | 90 | 2480 | 560 | | 200 | 140 | 51 | 4 | 3 | 3 | 25 | 2 | | | | | | | | | | | | | | |
| 2 | 21 | 62 | 13100 | 1450 | 80 | 3970 | 0 | 3210 | 80 | 2860 | 1490 | | 870 | 500 | 25 | 5 | 51 | 4 | 92 | 4 | 2 | 3 | 57 | 3 | 82 | 3 | 44 | 2 | 83 | 2 | 5 | 1 | | |
| 3 | 7 | 62 | 1100 | 40 | 0 | 100 | 0 | 190 | 150 | 390 | 250 | | 20 | 120 | | | | | | | | | | | | | | | | | | | | |
| 3 | 21 | 62 | 7300 | 310 | 0 | 1390 | 0 | 1990 | 170 | 1620 | 1840 | | 580 | 290 | 92 | 4 | 71 | 4 | 51 | 4 | 25 | 3 | 57 | 3 | 3 | 1 | 88 | 1 | | | | | | |
| 4 | 4 | 62 | 1300 | 0 | 0 | 0 | 0 | 130 | 0 | 60 | 1060 | | 0 | 370 | 92 | 2 | 88 | 1 | | | | | | | | | | | | | | | | |
| 4 | 17 | 62 | 4100 | 150 | 0 | 1490 | 0 | 1240 | 20 | 440 | 750 | | 40 | 230 | 35 | 4 | 51 | 3 | 57 | 2 | 71 | 1 | 92 | 1 | | | | | | | | | | |
| 5 | 1 | 62 | 600 | 0 | 0 | 20 | 0 | 20 | 60 | 60 | 460 | | 40 | 80 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 16 | 62 | 10500 | 40 | 680 | 2980 | 40 | 400 | 230 | 3760 | 2450 | | 1750 | 2320 | 71 | 4 | 68 | 3 | 38 | 3 | 35 | 3 | 17 | 3 | 83 | 2 | 88 | 2 | 30 | 2 | 25 | 2 | 57 | 2 |
| 5 | 30 | 62 | 18700 | 40 | 1390 | 4680 | 210 | 40 | 0 | 5110 | 7260 | | 1520 | 1560 | 68 | 5 | 88 | 5 | 83 | 4 | 35 | 4 | 71 | 4 | 16 | 3 | 30 | 3 | 87 | 3 | 92 | 3 | 24 | 2 |
| 6 | 12 | 62 | 700 | 0 | 0 | 100 | 0 | 20 | 0 | 100 | 440 | | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 6 | 26 | 62 | 1400 | 210 | 0 | 540 | 0 | 60 | 0 | 120 | 480 | | 0 | 20 | 38 | 1 | 3 | 1 | | | | | | | | | | | | | | | | |
| 7 | 10 | 62 | 28700 | 130 | 0 | 7170 | 0 | 130 | 0 | 7260 | 13970 | | 2450 | 2830 | 88 | 6 | 67 | 5 | 92 | 5 | 38 | 5 | 35 | 4 | 68 | 3 | 40 | 3 | 45 | 3 | 71 | 3 | 26 | 2 |
| 7 | 24 | 62 | 10500 | 410 | 120 | 2110 | 290 | 270 | 0 | 2940 | 4390 | | 1490 | 460 | 88 | 4 | 67 | 4 | 68 | 3 | 38 | 2 | 74 | 2 | 35 | 2 | 87 | 2 | 50 | 1 | 71 | 1 | 51 | 1 |
| 8 | 14 | 62 | 10400 | 130 | 210 | 2980 | 0 | 250 | 40 | 910 | 5880 | | 460 | 1160 | 88 | 4 | 25 | 4 | 68 | 3 | 35 | 3 | 74 | 3 | 38 | 2 | 30 | 2 | 67 | 1 | 12 | 1 | 83 | 1 |
| 8 | 28 | 62 | 19400 | 380 | 210 | 2110 | 0 | 130 | 0 | 3630 | 12910 | | 680 | 2150 | 83 | 6 | 68 | 5 | 88 | 5 | 87 | 4 | 38 | 3 | 71 | 3 | 1 | 1 | 35 | 1 | 30 | 1 | 40 | 1 |
| 9 | 11 | 62 | 100 | 0 | 0 | 10 | 0 | 0 | 0 | 20 | 30 | | 10 | 360 | | | | | | | | | | | | | | | | | | | | |

NATIONAL WATER QUALITY NETWORK

# PLANKTON POPULATION

STATE ARKANSAS
MAJOR BASIN SOUTHWEST-LOWER MISSISSIPPI RIVER
MINOR BASIN LOWER RED RIVER BELOW DENISON
STATION LOCATION RED RIVER AT
INDEX, ARKANSAS 043

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | 1ST GENUS | COUNT LEVEL | 2ND GENUS | COUNT LEVEL | 3RD GENUS | COUNT LEVEL | 4TH GENUS | COUNT LEVEL | 5TH GENUS | COUNT LEVEL | | 1ST GENUS | COUNT LEVEL | 2ND GENUS | COUNT LEVEL | 3RD GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 38 | 22 | 97 | 12 | 98 | 8 | 73 | 3 | 55 | 0 | 10 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 97 | 12 | 98 | 12 | 58 | 8 | 38 | 7 | 61 | 0 | 0 | 1 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 38 | 22 | 57 | 11 | 58 | 10 | 55 | 9 | 48 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 97 | 21 | 38 | 8 | 73 | 7 | 11 | 6 | 58 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 29 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 16 | 61 | | | | | | | | | | 430 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 10 | 62 | 80 | 47 | 97 | 6 | 92 | 5 | 38 | 4 | 38 | 230 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 25 | 62 | 92 | 26 | 71 | 6 | 73 | 6 | 55 | 6 | 56 | 0 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 7 | 62 | 92 | 26 | 82 | 11 | 70 | 8 | 58 | 4 | 61 | 0 | 0 | 2 | | | | | | | | | | | 5 | 76 | 1 | | | | | 0 | 0 |
| 2 | 21 | 62 | | | | | | | | | | 170 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 7 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 3 | 21 | 62 | 92 | 42 | 80 | 15 | 82 | 10 | 71 | 5 | 28 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 4 | 4 | 62 | 92 | 33 | 36 | 7 | 71 | 5 | 86 | 3 | 52 | 20 | 0 | 0 | | | | | | | | | | | 4 | 50 | 1 | | | | | 0 | 0 |
| 4 | 17 | 62 | 56 | 36 | 80 | 13 | 9 | 13 | 92 | 11 | 27 | 0 | 0 | 1 | | | | | | | | | | | 3 | 76 | 1 | | | | | 0 | 0 |
| 5 | 1 | 62 | 92 | 17 | 36 | 7 | 71 | 5 | 73 | 4 | 67 | 0 | 0 | 0 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 5 | 16 | 62 | 80 | 26 | 26 | 18 | 38 | 5 | 71 | 3 | 48 | 0 | 0 | 123 | 2 | 5 | 11 | 2 | 17 | 1 | | | | | 49 | 50 | 4 | 51 | 3 | 76 | 2 | 0 | 0 |
| 5 | 30 | 62 | 26 | 43 | 80 | 19 | 23 | 14 | 38 | 7 | 17 | 170 | 0 | 89 | 17 | 4 | 2 | 3 | | | | | | | 21 | 50 | 3 | | | | | 0 | 2 |
| 6 | 12 | 62 | 92 | 13 | 71 | 8 | 12 | 7 | 78 | 6 | 66 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 26 | 62 | 73 | 18 | 92 | 15 | 75 | 13 | 71 | 8 | 46 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 10 | 62 | 18 | 17 | 89 | 16 | 26 | 13 | 61 | 10 | 44 | 80 | 0 | 14 | 2 | 1 | 17 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 24 | 62 | 20 | 38 | 26 | 16 | 71 | 9 | 82 | 5 | 32 | 0 | 0 | 406 | 2 | 5 | 11 | 5 | 17 | 4 | 7 | 3 | 22 | 3 | 6 | 50 | 1 | | | | | 0 | 0 |
| 8 | 14 | 62 | 4 | 13 | 71 | 9 | 26 | 7 | 18 | 6 | 65 | 0 | 0 | 433 | 11 | 6 | 17 | 5 | 2 | 5 | 22 | 3 | 7 | 3 | 0 | | | | | | | 0 | 0 |
| 8 | 28 | 62 | 26 | 22 | 38 | 16 | 69 | 8 | 82 | 8 | 46 | 0 | 0 | 369 | 11 | 6 | 17 | 4 | 2 | 4 | 21 | 2 | 18 | 2 | 0 | | | | | | | 0 | 0 |
| 9 | 11 | 62 | 69 | 11 | 65 | 8 | 38 | 7 | 72 | 6 | 68 | 0 | 0 | – | | | | | | | | | | | – | | | | | | | – | – |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** SOUTHWEST–LOWER MISSISSIPPI RIVER
**MINOR BASIN** LOWER RED RIVER BELOW DENISON
**STATION LOCATION** RED RIVER AT
INDEX, ARKANSAS 43

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 16 | - | - | - | - | - | - | 0 | 29 | 28 | 34 | 28 | 45 | | | | | | |
| 10 | 9 | 61 | 10 | 18 | 7 | 4 | 1 | 2 | 8 | 4 | 46 | 15 | 15 | 11 | 61 | 19 | | | | | | |
| 10 | 16 | 61 | 10 | 25 | - | - | - | - | - | - | 69 | 29 | 137 | 30 | 206 | 42 | | | | | | |
| 12 | 16 | 61 | 12 | 29 | 3 | 2 | 1 | 1 | 4 | 2 | 124 | 9 | 24 | 5 | 148 | 10 | | | | | | |
| 12 | 28 | 61 | 1 | 8 | - | - | - | - | - | - | 51 | 24 | 83 | 28 | 134 | 37 | | | | | | |
| 1 | 10 | 62 | 1 | 19 | 0 | 2 | 1 | 3 | 1 | 4 | 78 | 20 | 36 | 21 | 114 | 29 | | | | | | |
| 1 | 17 | 62 | 1 | 31 | - | - | - | - | - | - | 131 | 32 | 40 | 35 | 171 | 47 | | | | | | |
| 1 | 25 | 62 | 2 | 7 | - | - | - | - | - | - | 57 | 14 | 23 | 14 | 80 | 20 | | | | | | |
| 1 | 31 | 62 | 2 | 12 | - | - | - | - | - | - | 247 | 13 | 95 | 9 | 342 | 16 | | | | | | |
| 2 | 7 | 62 | 2 | 19 | - | - | - | - | - | - | 22 | 21 | 63 | 26 | 85 | 33 | | | | | | |
| 2 | 20 | 62 | 3 | 5 | - | - | - | - | - | - | 44 | 22 | 30 | 26 | 74 | 34 | | | | | | |
| 4 | 17 | 62 | 5 | 22 | - | - | - | - | - | - | 42 | 29 | 60 | 32 | 102 | 49 | | | | | | |
| 5 | 1 | 62 | 6 | 8 | - | - | - | - | - | - | 141 | 23 | 50 | 9 | 191 | 25 | | | | | | |
| 5 | 30 | 62 | 6 | 29 | 1 | 2 | 4 | 4 | 5 | 4 | 13 | 22 | 39 | 27 | 52 | 35 | | | | | | |
| 6 | 12 | 62 | 7 | 9 | 8 | 7 | 0 | 1 | 8 | 7 | 95 | 44 | 16 | 9 | 111 | 45 | | | | | | |
| 7 | 24 | 62 | 8 | 21 | 0 | 2 | 2 | 5 | 2 | 5 | 26 | 26 | 49 | 34 | 75 | 43 | | | | | | |
| 8 | 14 | 62 | 9 | 6 | 0 | 2 | 1 | 5 | 1 | 6 | 0 | 58 | 11 | 32 | 11 | 66 | | | | | | |
| 8 | 28 | 62 | 10 | 24 | - | - | - | - | - | - | 8 | 33 | 8 | 36 | 16 | 48 | | | | | | |
| 9 | 11 | 62 | 10 | 1 | 22 | 14 | 1 | 1 | 23 | 14 | 82 | 92 | 25 | 10 | 107 | 93 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** ARKANSAS
**MAJOR BASIN** SOUTHWEST LOWER MISSISSIPPI RIVER
**MINOR BASIN** LOWER RED RIVER BELOW DENISON
**STATION LOCATION** RED RIVER AT
INDEX, ARKANSAS 43

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 21.0 | 7.4 | 8.0 | 1.0 | - | 3.8 | 6.7 | - | 167 | 120 | 130 | 70 | 65 | - | - | - | 2700 |
| 10 | 9 | 61 | 20.0 | 8.8 | 7.7 | 1.6 | - | 4.7 | 11.7 | - | 80 | 77 | 158 | 60 | 250 | - | - | - | 6000 |
| 10 | 16 | 61 | 20.0 | 6.6 | 7.9 | 2.0 | - | 4.2 | 8.2 | - | 140 | 95 | 300 | 40 | 200 | - | - | - | - |
| 10 | 23 | 61 | 18.5 | 10.0 | 8.1 | 2.4 | - | - | - | - | 224 | 115 | 420 | 80 | 155 | - | - | - | 2000 |
| 10 | 30 | 61 | 19.0 | 9.6 | 8.0 | 1.4 | - | - | - | - | 180 | 124 | 163 | 75 | 165 | - | - | - | 100 |
| 11 | 6 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 140 |
| 11 | 13 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 140 |
| 11 | 20 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 240 |
| 11 | 29 | 61 | - | - | 7.4 | - | 46 | - | - | - | 111 | 54 | 166 | 30 | 204 | 65 | .0 | 364 | 820 |
| 12 | 16 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 65 | .2 | - | - |
| 12 | 28 | 61 | - | - | 7.2 | - | 27 | - | - | - | 251 | 88 | 242 | 20 | 58 | 215 | .0 | 699 | - |
| 2 | 8 | 62 | - | - | 7.5 | - | 33 | - | - | - | 203 | 95 | 186 | 15 | 54 | 200 | .0 | 665 | - |
| 2 | 23 | 62 | - | - | 7.5 | - | 45 | - | - | - | 191 | 96 | 246 | 20 | 108 | 175 | .0 | 638 | - |
| 7 | 25 | 62 | - | - | 7.3 | - | - | - | - | - | 300 | 110 | 352 | 25 | - | 245 | .0 | 980 | - |
| 8 | 14 | 62 | - | - | 8.0 | - | - | - | - | - | 348 | 82 | 373 | 55 | 100 | 240 | .0 | 1043 | - |
| 8 | 28 | 62 | - | - | 8.2 | - | - | - | - | - | 430 | 114 | 390 | 35 | 100 | 210 | .0 | 1114 | - |
| 9 | 11 | 62 | - | - | 7.7 | - | - | - | - | - | 60 | 120 | 152 | 25 | 1000 | 40 | - | 295 | - |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Index, Arkansas
Operated by U.S. Geological Survey

MAJOR BASIN Southwest-Lower Mississippi River

MINOR BASIN Lower Red River below Denison

STATION LOCATION Red River at
Index, Arkansas

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.100 | 4.520 | 21.800 | 7.360 | 15.900 | 18.400 | 12.100 | 30.600 | 1.800 | 12.700 | 5.200 | 2.620 |
| 2 | 4.700 | 3.940 | 17.900 | 7.600 | 12.500 | 14.500 | 26.400 | 25.800 | 2.110 | 13.800 | 4.830 | 4.350 |
| 3 | 5.460 | 3.210 | 14.800 | 7.360 | 10.700 | 12.500 | 30.000 | 20.100 | 3.710 | 15.900 | 4.660 | 5.400 |
| 4 | 6.060 | 3.000 | 14.100 | 6.700 | 9.580 | 10.700 | 23.400 | 15.400 | 19.100 | 13.400 | 5.600 | 5.600 |
| 5 | 6.480 | 3.420 | 13.400 | 6.060 | 8.560 | 9.060 | 17.500 | 12.300 | 24.000 | 9.000 | 8.720 | 6.220 |
| 6 | 8.080 | 4.880 | 11.800 | 5.260 | 7.840 | 7.600 | 14.500 | 9.600 | 19.100 | 7.140 | 9.300 | 6.440 |
| 7 | 9.580 | 6.480 | 12.100 | 5.460 | 7.140 | 6.260 | 12.100 | 8.180 | 14.200 | 7.140 | 7.400 | 5.800 |
| 8 | 9.320 | 5.660 | 17.100 | 6.060 | 6.480 | 5.260 | 11.800 | 7.660 | 10.900 | 7.400 | 6.010 | 5.800 |
| 9 | 7.840 | 4.180 | 18.800 | 6.060 | 5.260 | 4.430 | 12.500 | 6.440 | 14.200 | 7.660 | 4.500 | 12.700 |
| 10 | 6.260 | 3.210 | 20.200 | 5.860 | 4.180 | 4.700 | 12.800 | 5.200 | 21.200 | 7.660 | 3.260 | 25.800 |
| 11 | 5.260 | 3.000 | 23.400 | 5.060 | 3.630 | 6.920 | 11.500 | 4.200 | 22.800 | 6.440 | 3.390 | 32.000 |
| 12 | 5.060 | 3.630 | 27.000 | 4.100 | 3.490 | 7.600 | 8.800 | 3.600 | 24.000 | 5.200 | 5.010 | 28.200 |
| 13 | 4.700 | 3.780 | 27.000 | 3.700 | 3.350 | 7.140 | 6.700 | 4.200 | 38.800 | 4.050 | 5.800 | 15.400 |
| 14 | 4.520 | 3.700 | 24.000 | 4.700 | 5.310 | 6.260 | 6.060 | 4.350 | 48.700 | 4.500 | 6.010 | 10.600 |
| 15 | 10.900 | 3.700 | 20.200 | 8.080 | 4.280 | 5.460 | 6.260 | 4.050 | 47.800 | 5.400 | 5.800 | 7.920 |
| 16 | 15.900 | 4.260 | 17.900 | 10.100 | 6.700 | 4.340 | 6.060 | 3.530 | 48.600 | 5.600 | 4.660 | 6.900 |
| 17 | 15.900 | 6.060 | 17.500 | 10.900 | 7.600 | 3.780 | 5.860 | 3.060 | 42.800 | 5.600 | 3.530 | 6.900 |
| 18 | 13.400 | 6.700 | 18.800 | 10.400 | 8.560 | 4.100 | 6.480 | 2.430 | 38.800 | 5.800 | 3.600 | 6.900 |
| 19 | 11.200 | 6.700 | 20.200 | 9.840 | 8.560 | 4.340 | 8.320 | 2.110 | 33.900 | 5.400 | 4.660 | 6.440 |
| 20 | 10.100 | 6.480 | 20.200 | 9.320 | 7.600 | 4.430 | 8.560 | 1.930 | 33.900 | 4.200 | 5.010 | 5.600 |
| 21 | 9.840 | 6.480 | 17.500 | 9.060 | 6.700 | 4.180 | 9.580 | 1.990 | 33.200 | 3.750 | 5.010 | 4.660 |
| 22 | 9.840 | 7.360 | 15.200 | 9.580 | 6.480 | 3.700 | 9.580 | 2.120 | 30.600 | 5.200 | 5.010 | 5.200 |
| 23 | 9.840 | 10.700 | 13.100 | 11.200 | 7.060 | 3.490 | 8.080 | 2.160 | 28.200 | 5.800 | 4.500 | 5.600 |
| 24 | 8.560 | 28.400 | 10.900 | 13.800 | 11.200 | 3.780 | 7.600 | 2.120 | 25.200 | 5.800 | 3.320 | 5.800 |
| 25 | 6.920 | 47.800 | 9.580 | 18.400 | 15.500 | 5.260 | 12.100 | 2.000 | 24.600 | 5.800 | 3.390 | 5.800 |
| 26 | 5.460 | 53.800 | 8.800 | 18.400 | 21.200 | 7.360 | 23.400 | 1.840 | 26.400 | 5.010 | 4.500 | 5.800 |
| 27 | 4.180 | 52.100 | 8.080 | 21.200 | 27.000 | 12.100 | 27.600 | 1.790 | 28.800 | 4.200 | 5.010 | 4.500 |
| 28 | 3.700 | 41.200 | 6.920 | 30.000 | 24.600 | 16.700 | 26.400 | 1.800 | 22.300 | 5.010 | 5.200 | 3.460 |
| 29 | 4.430 | 31.300 | 5.860 | 33.200 |  | 15.500 | 27.600 | 1.800 | 11.700 | 6.220 | 5.200 | 2.570 |
| 30 | 4.880 | 25.800 | 5.060 | 30.000 |  | 11.200 | 30.000 | 1.880 | 14.600 | 6.440 | 4.200 | 2.380 |
| 31 | 4.700 |  | 6.060 | 22.300 |  | 10.100 |  | 1.800 |  | 6.220 | 2.680 |  |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 10 | 5 | 61 | 10 | 13 | 5430 | 201 | 48 | 153 | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 6 | 61 | 11 | 14 | 5350 | 213 | 62 | 151 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 4 | 61 | 12 | 11 | 5030 | 229 | 40 | 189 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 4 | 61 | | * | 15810 | 214 | 50 | 164 | 3 | 13 | 12 | 1 | 0 | 10 | 1 | 6 | 5 | 1 | 10 |
| 1 | 2 | 62 | 1 | 9 | 5050 | 232 | 66 | 166 | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 5 | 62 | 2 | 12 | 5060 | 201 | 62 | 139 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 5 | 62 | 3 | 12 | 5030 | 130 | 50 | 80 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 5 | 62 | | * | 15140 | 187 | 59 | 128 | 4 | 16 | 17 | 3 | 2 | 11 | 1 | 5 | 4 | 1 | 12 |
| 4 | 2 | 62 | 4 | 9 | 5010 | 215 | 69 | 146 | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 7 | 62 | 5 | 14 | 5000 | 215 | 84 | 131 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 9 | 62 | 6 | 16 | 4980 | 252 | 89 | 163 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 9 | 62 | | * | 14990 | 228 | 81 | 147 | 2 | 23 | 17 | 1 | 1 | 14 | 1 | 7 | 11 | 2 | 19 |
| 7 | 3 | 62 | 7 | 10 | 5060 | 255 | 100 | 155 | 3 | 29 | 24 | 1 | 1 | 21 | 1 | 12 | 12 | 2 | 18 |
| 8 | 6 | 62 | 8 | 13 | 5060 | 229 | 97 | 132 | 9 | 23 | 23 | 3 | 1 | 16 | 3 | 9 | 11 | 1 | 21 |
| 9 | 6 | 62 | 9 | 14 | 5340 | 338 | 213 | 125 | 6 | 45 | 53 | 6 | 2 | 43 | 2 | 26 | 23 | 4 | 56 |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 14 | - | - | - | - | - | - | 1 | 25 | 91 | 42 | 92 | 49 | | | | | | |
| 10 | 9 | 61 | 10 | 27 | 0 | 2 | 0 | 6 | 0 | 6 | 0 | 20 | 10 | 27 | 10 | 34 | | | | | | |
| 10 | 16 | 61 | 10 | 31 | - | - | - | - | - | - | 10 | 49 | 33 | 63 | 43 | 80 | | | | | | |
| 10 | 23 | 61 | 11 | 1 | - | - | - | - | - | - | 0 | 22 | 536 | 32 | 536 | 39 | | | | | | |
| 10 | 30 | 61 | 11 | 9 | - | - | - | - | - | - | 0 | 39 | 0 | 47 | 0 | 61 | | | | | | |
| 11 | 6 | 61 | 11 | 17 | - | - | - | - | - | - | 4 | 26 | 13 | 37 | 17 | 45 | | | | | | |
| 11 | 13 | 61 | 11 | 28 | 0 | 3 | 3 | 7 | 3 | 8 | 4 | 27 | 0 | 38 | 4 | 47 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | - | - | - | - | - | - | 16 | 26 | 40 | 38 | 56 | 46 | | | | | | |
| 11 | 27 | 61 | 12 | 5 | - | - | - | - | - | - | 17 | 27 | 0 | 36 | 17 | 45 | | | | | | |
| 12 | 4 | 61 | 12 | 14 | - | - | - | - | - | - | 0 | 27 | 15 | 38 | 15 | 47 | | | | | | |
| 12 | 11 | 61 | 12 | 22 | - | - | - | - | - | - | 0 | 19 | 15 | 26 | 15 | 32 | | | | | | |
| 12 | 18 | 61 | 12 | 29 | - | - | - | - | - | - | 2 | 22 | 4 | 33 | 6 | 40 | | | | | | |
| 12 | 26 | 61 | 1 | 3 | - | - | - | - | - | - | 24 | 27 | 48 | 38 | 72 | 47 | | | | | | |
| 1 | 2 | 62 | 1 | 23 | - | - | - | - | - | - | 33 | 56 | 0 | 65 | 33 | 86 | | | | | | |
| 1 | 8 | 62 | 1 | 18 | 1 | 3 | 0 | 5 | 1 | 6 | 0 | 20 | 8 | 27 | 8 | 34 | | | | | | |
| 1 | 15 | 62 | 1 | 24 | - | - | - | - | - | - | 73 | 27 | 25 | 38 | 98 | 47 | | | | | | |
| 1 | 22 | 62 | 2 | 2 | - | - | - | - | - | - | 0 | 27 | 20 | 37 | 20 | 46 | | | | | | |
| 1 | 29 | 62 | 2 | 8 | - | - | - | - | - | - | 1 | 53 | 60 | 75 | 61 | 91 | | | | | | |
| 2 | 5 | 62 | 2 | 15 | - | - | - | - | - | - | 22 | 27 | 54 | 37 | 76 | 46 | | | | | | |
| 2 | 12 | 62 | 2 | 20 | 0 | 2 | 1 | 6 | 1 | 6 | 10 | 18 | 84 | 29 | 94 | 34 | | | | | | |
| 2 | 20 | 62 | 3 | 1 | - | - | - | - | - | - | 2 | 26 | 51 | 37 | 53 | 45 | | | | | | |
| 2 | 26 | 62 | 3 | 13 | - | - | - | - | - | - | 6 | 19 | 56 | 28 | 62 | 34 | | | | | | |
| 3 | 5 | 62 | 3 | 20 | - | - | - | - | - | - | 4 | 20 | 13 | 28 | 17 | 34 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | 0 | 2 | 1 | 6 | 1 | 6 | 18 | 20 | 52 | 29 | 70 | 35 | | | | | | |
| 3 | 19 | 62 | 4 | 3 | - | - | - | - | - | - | 34 | 27 | 19 | 34 | 53 | 43 | | | | | | |
| 3 | 26 | 62 | 4 | 6 | - | - | - | - | - | - | 3 | 28 | 41 | 39 | 44 | 48 | | | | | | |
| 4 | 2 | 62 | 4 | 19 | - | - | - | - | - | - | 10 | 26 | 8 | 37 | 18 | 45 | | | | | | |
| 4 | 9 | 62 | 4 | 27 | 1 | 2 | 1 | 5 | 2 | 5 | 27 | 20 | 43 | 27 | 70 | 34 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 49 | 27 | 30 | 36 | 79 | 45 | | | | | | |
| 4 | 23 | 62 | 5 | 22 | - | - | - | - | - | - | 12 | 33 | 35 | 39 | 47 | 51 | | | | | | |
| 4 | 30 | 62 | 5 | 25 | - | - | - | - | - | - | 0 | 31 | 122 | 46 | 122 | 55 | | | | | | |
| 5 | 7 | 62 | 6 | 11 | - | - | - | - | - | - | 9 | 18 | 93 | 48 | 102 | 51 | | | | | | |
| 5 | 14 | 62 | 6 | 22 | 1 | 2 | 3 | 6 | 4 | 6 | 25 | 25 | 56 | 35 | 81 | 40 | | | | | | |
| 5 | 21 | 62 | 6 | 27 | - | - | - | - | - | - | 10 | 31 | 15 | 39 | 25 | 50 | | | | | | |
| 5 | 28 | 62 | 6 | 29 | - | - | - | - | - | - | 6 | 16 | 34 | 21 | 40 | 26 | | | | | | |
| 6 | 4 | 62 | 7 | 3 | 0 | 2 | 0 | 2 | 0 | 3 | 0 | 35 | 37 | 36 | 37 | 50 | | | | | | |
| 6 | 11 | 62 | 7 | 13 | 1 | 2 | 3 | 5 | 4 | 5 | 32 | 17 | 48 | 22 | 80 | 28 | | | | | | |
| 6 | 18 | 62 | 7 | 17 | - | - | - | - | - | - | 0 | 35 | 27 | 38 | 27 | 52 | | | | | | |
| 6 | 25 | 62 | 7 | 24 | - | - | - | - | - | - | 30 | 27 | 52 | 36 | 82 | 45 | | | | | | |
| 7 | 2 | 62 | 8 | 6 | - | - | - | - | - | - | 17 | 22 | 32 | 29 | 49 | 36 | | | | | | |
| 7 | 16 | 62 | 8 | 14 | - | - | - | - | - | - | 7 | 24 | 60 | 37 | 67 | 44 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 7 | 23 | 62 | 8 | 15 | - | - | - | - | - | - | 0 | 31 | 39 | 38 | 39 | 49 | | | | | | | |
| 7 | 30 | 62 | 8 | 22 | - | - | - | - | - | - | 4 | 25 | 19 | 36 | 23 | 44 | | | | | | | |
| 8 | 6 | 62 | 10 | 12 | - | - | - | - | - | - | 5 | 28 | 36 | 33 | 41 | 43 | | | | | | | |
| 8 | 13 | 62 | 10 | 13 | 1 | 2 | 3 | 4 | 4 | 4 | 56 | 35 | 180 | 32 | 236 | 47 | | | | | | | |
| 8 | 20 | 62 | 9 | 5 | - | - | - | - | - | - | 0 | 23 | 34 | 36 | 34 | 43 | | | | | | | |
| 8 | 27 | 62 | 9 | 27 | - | - | - | - | - | - | 9 | 31 | 8 | 45 | 17 | 55 | | | | | | | |
| 9 | 4 | 62 | 9 | 27 | - | - | - | - | - | - | 7 | 24 | 28 | 35 | 35 | 42 | | | | | | | |
| 9 | 10 | 62 | 10 | 8 | - | - | - | - | - | - | 13 | 46 | 262 | 46 | 275 | 66 | | | | | | | |
| 9 | 17 | 62 | 10 | 11 | - | - | - | - | - | - | 656 | 38 | 21 | 31 | 677 | 49 | | | | | | | |
| 9 | 24 | 62 | 10 | 22 | - | - | - | - | - | - | 27 | 12 | 22 | 17 | 49 | 21 | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** TEXAS
**MAJOR BASIN** SOUTHWEST—LOWER MISSISSIPPI RIVER
**MINOR BASIN** LOWER RED RIVER BELOW DENISON
**STATION LOCATION** RED RIVER AT
DENISON, TEXAS 44

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 2400 | 40 | 0 | 500 | 0 | 40 | 0 | 150 | 1700 | 20 | 230 | 83 | 4 | 35 | 1 | 84 | 1 | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 2500 | 20 | 0 | 1580 | 0 | 270 | 0 | 190 | 480 | 40 | 120 | 83 | 2 | 35 | 4 | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 3100 | 0 | 0 | 1080 | 0 | 170 | 0 | 500 | 1410 | 20 | 170 | 83 | 4 | 35 | 3 | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 5500 | 110 | 0 | 1580 | 0 | 1100 | 0 | 880 | 1800 | 380 | 590 | 38 | 7 | 51 | 3 | 35 | 3 | 71 | 2 | 69 | 1 | 57 | 1 | 30 | 1 | 28 | 1 | 44 | 1 | 87 | 1 |
| 12 | 4 | 61 | 9400 | 0 | 0 | 1600 | 0 | 1350 | 0 | 790 | 5650 | 50 | 410 | 83 | 5 | 35 | 3 | 51 | 3 | 57 | 2 | 69 | 2 | 38 | 1 | 92 | 1 | | | | | | |
| 12 | 18 | 61 | 3800 | 0 | 0 | 830 | 0 | 330 | 0 | 580 | 2110 | 100 | 370 | 83 | 4 | 71 | 2 | 35 | 2 | 51 | 1 | | | | | | | | | | | | |
| 1 | 2 | 62 | 9100 | 290 | 0 | 2410 | 0 | 2790 | 50 | 1490 | 2050 | 250 | 270 | 83 | 4 | 35 | 4 | 51 | 4 | 57 | 4 | 68 | 3 | 71 | 3 | 25 | 1 | 1 | 1 | 44 | 1 | 92 | 1 |
| 1 | 15 | 62 | 9500 | 1440 | 50 | 1220 | 0 | 3380 | 0 | 860 | 2570 | 430 | 430 | 83 | 5 | 57 | 4 | 3 | 4 | 51 | 3 | 71 | 3 | 35 | 3 | 25 | 1 | | | | | | |
| 2 | 5 | 62 | 2000 | 40 | 20 | 390 | 0 | 1370 | 20 | 0 | 170 | 0 | 190 | 57 | 4 | 35 | 1 | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 600 | 0 | 50 | 250 | 0 | 160 | 20 | 0 | 160 | 20 | 180 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 1400 | 390 | 0 | 460 | 0 | 80 | 80 | 120 | 270 | 170 | 290 | 3 | 2 | 25 | 1 | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 1500 | 290 | 0 | 700 | 0 | 150 | 20 | 80 | 210 | 40 | 170 | 35 | 2 | 3 | 1 | 38 | 1 | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 2500 | 830 | 0 | 850 | 0 | 370 | 60 | 150 | 210 | 20 | 20 | 3 | 3 | 35 | 2 | 51 | 2 | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 6000 | 3190 | 0 | 2360 | 0 | 40 | 0 | 150 | 270 | 60 | 120 | 3 | 5 | 35 | 4 | 25 | 1 | 5 | 1 | 83 | 1 | | | | | | | | | | |
| 5 | 7 | 62 | 3300 | 540 | 0 | 2240 | 0 | 80 | 0 | 270 | 190 | 40 | 0 | | | | | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 2600 | 380 | 110 | 490 | 0 | 210 | 0 | 650 | 690 | 110 | 450 | 35 | 2 | 71 | 1 | 83 | 1 | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 3100 | 20 | 0 | 1240 | 20 | 340 | 90 | 110 | 1310 | 90 | 610 | 38 | 3 | 35 | 3 | 57 | 1 | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 4100 | 700 | 40 | 2030 | 0 | 460 | 0 | 170 | 750 | 80 | 410 | 35 | 4 | 3 | 2 | 38 | 2 | 83 | 2 | 51 | 2 | | | | | | | | | | |
| 7 | 2 | 62 | 2400 | 80 | 0 | 680 | 0 | 20 | 20 | 510 | 1060 | 80 | 680 | 83 | 4 | 71 | 2 | 68 | 1 | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 3900 | 3690 | 0 | 80 | 0 | 80 | 0 | 0 | 60 | 0 | 0 | 2 | 5 | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 400 | 0 | 0 | 60 | 0 | 60 | 0 | 40 | 250 | 60 | 0 | 83 | 1 | | | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 1700 | 0 | 0 | 80 | 0 | 20 | 0 | 420 | 1140 | 0 | 460 | 83 | 2 | 92 | 2 | 68 | 1 | 76 | 1 | | | | | | | | | | | | |
| 9 | 4 | 62 | 200 | 10 | 20 | 40 | 0 | 0 | 0 | 0 | 80 | 20 | 80 | | | | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 2100 | 0 | 0 | 130 | 0 | 0 | 0 | 680 | 1310 | 210 | 170 | 68 | 3 | 92 | 2 | 83 | 1 | 88 | 1 | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** TEXAS

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** LOWER RED RIVER BELOW DENISON

**STATION LOCATION** RED RIVER AT

DENISON, TEXAS

044

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 38 | 66 | 26 | 7 | 46 | 7 | 70 | 2 | 18 | 350 | 0 | 5 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 38 | 94 | 25 | 2 | 26 | 1 | | 1 | 2 | 0 | 0 | 81 | 11 | 4 | 2 | 1 | | | | | | | 115 | 51 | 5 | | | | | 0 | 0 |
| 11 | 6 | 61 | 38 | 64 | 82 | 15 | 26 | 6 | 92 | 3 | 12 | 150 | 0 | 16 | 11 | 2 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 38 | 94 | | 1 | | 1 | | 1 | 3 | 230 | 0 | 12 | 11 | 1 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 38 | 78 | 26 | 3 | 56 | 2 | 76 | 2 | 15 | 0 | 10 | 14 | 11 | 2 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 38 | 93 | 82 | 2 | 80 | 1 | | 1 | 3 | 0 | 10 | 8 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 38 | 87 | 92 | 7 | 76 | 2 | 46 | 1 | 3 | 0 | 30 | 38 | 21 | 3 | | | | | | | | | 4 | 51 | 1 | | | | | 0 | 0 |
| 1 | 15 | 62 | 38 | 95 | 92 | 3 | 80 | 1 | 97 | 1 | | 0 | 20 | 221 | 21 | 6 | 2 | 3 | 11 | 2 | | | | | 11 | 76 | 1 | 50 | 1 | 51 | 1 | 0 | 0 |
| 2 | 5 | 62 | | | | | | | | | | 0 | 10 | 88 | 21 | 4 | 14 | 3 | 2 | 2 | 11 | 1 | | | 17 | 50 | 2 | 51 | 2 | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 110 | 0 | 5 | | | | | | | | | | | 4 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | | | | | | | | | | 0 | 0 | 11 | 11 | 2 | | | | | | | | | 8 | 50 | 1 | | | | | 0 | 0 |
| 3 | 19 | 62 | | | | | | | | | | 0 | 0 | 22 | 11 | 2 | 7 | 1 | | | | | | | 22 | 76 | 3 | 50 | 2 | | | 0 | 0 |
| 4 | 2 | 62 | 38 | 26 | 92 | 13 | 91 | 8 | 47 | 8 | 45 | 0 | 10 | 16 | 11 | 2 | | | | | | | | | 14 | 50 | 2 | 76 | 2 | | | 0 | 0 |
| 4 | 16 | 62 | 38 | 42 | 92 | 13 | 80 | 7 | 71 | 4 | 34 | 0 | 10 | 12 | 11 | 1 | 7 | 1 | | | | | | | 20 | 76 | 3 | 50 | 1 | | | 0 | 0 |
| 5 | 7 | 62 | 38 | 89 | 80 | 5 | 26 | 2 | 16 | 2 | 2 | 0 | 0 | 13 | 7 | 2 | | | | | | | | | 10 | 76 | 1 | 52 | 1 | | | 0 | 0 |
| 5 | 21 | 62 | | | | | | | | | | 0 | 10 | 3 | | | | | | | | | | | 5 | 50 | 1 | | | | | 0 | 0 |
| 6 | 4 | 62 | 38 | 57 | 80 | 17 | 82 | 6 | 26 | 3 | 17 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 38 | 58 | 80 | 9 | 56 | 3 | 26 | 2 | 28 | 0 | 10 | 10 | 17 | 1 | | | | | | | | | 13 | 51 | 2 | | | | | 0 | 0 |
| 7 | 2 | 62 | 38 | 33 | 71 | 12 | 80 | 9 | 26 | 5 | 41 | 0 | 10 | 26 | 11 | 2 | 17 | 1 | | | | | | | 7 | 51 | 1 | | | | | 0 | 0 |
| 7 | 16 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 38 | 45 | 91 | 13 | 8 | 8 | 71 | 1 | 33 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 38 | 52 | 91 | 24 | 8 | 7 | 26 | 6 | 11 | 0 | 0 | 72 | 11 | 4 | 17 | 1 | | | | | | | 6 | 50 | 1 | 76 | 1 | | | 0 | 0 |
| 9 | 4 | 62 | 91 | 48 | 38 | 42 | 26 | 3 | 47 | 2 | 5 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 91 | 17 | 26 | 17 | 89 | 11 | 92 | 8 | 47 | 0 | 0 | 23 | 17 | 2 | 11 | 1 | | | | | | | 9 | 76 | 2 | | | | | 0 | 0 |

687-228 O-63—43

**MINOR BASIN** LOWER RED RIVER BELOW DENISON

**STATION LOCATION** RED RIVER AT

DENISON, TEXAS

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | CO per |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 22.2 | - | 7.8 | - | - | - | - | - | 460 | 112 | 520 | 5 | 0 | 315 | .0 | 1343 | |
| 10 | 9 | 61 | 22.2 | - | 7.8 | - | - | - | - | - | 445 | 110 | 470 | 5 | 5 | 325 | .0 | 1356 | |
| 10 | 10 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 10 | 16 | 61 | 21.1 | - | 8.0 | - | - | - | - | - | 455 | 106 | 500 | 5 | 5 | 325 | .1 | 1309 | |
| 10 | 23 | 61 | 20.0 | - | 8.0 | - | - | - | - | - | 460 | 112 | 570 | - | 5 | 325 | .0 | 1300 | |
| 10 | 30 | 61 | 20.5 | - | 8.0 | - | - | - | - | - | 465 | 112 | 470 | 0 | 5 | 335 | .0 | 1318 | |
| 10 | 31 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 11 | 6 | 61 | 16.1 | - | 8.0 | - | - | - | - | - | - | 112 | 500 | 0 | 5 | 305 | .0 | 1312 | |
| 11 | 7 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 11 | 13 | 61 | 17.2 | - | 8.0 | - | - | - | - | - | 440 | 110 | 540 | 5 | 5 | 305 | .0 | 1323 | |
| 11 | 14 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 11 | 20 | 61 | 16.6 | - | 7.8 | - | - | - | - | - | 435 | 120 | 450 | 5 | 25 | 315 | .0 | 1311 | |
| 11 | 21 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 11 | 27 | 61 | 14.4 | - | 7.8 | - | - | - | - | - | 435 | 112 | 490 | - | 5 | 205 | .0 | 1297 | |
| 12 | 4 | 61 | 14.4 | - | 7.8 | - | - | - | - | - | 410 | 110 | 500 | 0 | 5 | 315 | .1 | 1290 | |
| 12 | 5 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 12 | 11 | 61 | 13.8 | - | 7.8 | - | - | - | - | - | 430 | 120 | 455 | 5 | 5 | 305 | .0 | 1285 | |
| 12 | 18 | 61 | 11.1 | - | 7.8 | - | - | - | - | - | 420 | 112 | 440 | - | 5 | 295 | .1 | 1248 | |
| 12 | 26 | 61 | 12.6 | - | 7.8 | - | - | - | - | - | - | 110 | 440 | - | 5 | - | - | - | |
| 1 | 2 | 62 | 8.8 | - | 7.8 | - | - | - | - | - | 425 | 110 | 440 | 5 | 5 | 305 | .0 | 1227 | |
| 1 | 8 | 62 | 8.3 | - | 8.0 | - | - | - | - | - | - | 116 | 420 | - | 5 | 252 | .0 | 1212 | |
| 1 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 1 | 15 | 62 | 5.5 | - | 8.0 | - | - | - | - | - | 395 | 114 | 450 | - | 5 | 275 | .0 | - | |
| 1 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 1 | 22 | 62 | - | - | - | - | - | - | - | - | 405 | - | - | 5 | - | 275 | .0 | 1197 | |
| 1 | 23 | 62 | 4.4 | - | 7.8 | - | - | - | - | - | - | 112 | 500 | - | 5 | - | - | - | |
| 1 | 29 | 62 | 5.5 | - | 8.0 | - | - | - | - | - | 385 | 112 | 450 | - | 5 | 270 | .0 | 1170 | |
| 1 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 2 | 5 | 62 | 4.4 | - | 7.8 | - | - | - | - | - | 390 | 114 | 420 | - | 0 | 275 | .0 | 1148 | |
| 2 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 2 | 13 | 62 | 7.7 | - | 8.0 | - | - | - | - | - | - | 116 | 410 | - | 5 | - | - | - | |
| 2 | 20 | 62 | 7.7 | - | 7.8 | - | - | - | - | - | 391 | 112 | 500 | 5 | 0 | 290 | .0 | 1145 | |
| 2 | 26 | 62 | 8.8 | - | 8.0 | - | - | - | - | - | 394 | 112 | 460 | 5 | 5 | 280 | .0 | 1206 | |
| 2 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 3 | 5 | 62 | 8.8 | - | 7.8 | - | - | - | - | - | 380 | 118 | 40 | * | 5 | 280 | .0 | 1170 | |
| 3 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 3 | 12 | 62 | 8.8 | - | 8.0 | - | - | - | - | - | 375 | 116 | 440 | 5 | 3 | 290 | - | 1182 | |
| 3 | 13 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 3 | 19 | 62 | - | - | - | - | - | - | - | - | 360 | - | - | 5 | - | 280 | .0 | 1172 | |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 3 | 26 | 62 | 10.0 | - | 8.0 | - | - | - | - | - | 380 | 120 | 410 | 5 | 5 | 235 | - | 1177 | - |
| 3 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 110 |
| 4 | 2 | 62 | - | - | - | - | - | - | - | - | 375 | - | - | 5 | - | 270 | .0 | 1174 | - |
| 4 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 13 |
| 4 | 10 | 62 | 12.2 | - | 8.0 | - | - | - | - | - | - | 120 | 455 | - | 5 | - | - | - | 130 |
| 4 | 16 | 62 | 13.3 | - | 7.8 | - | - | - | - | - | 375 | 122 | 450 | 5 | 5 | 270 | .0 | 1177 | - |
| 4 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *3 |
| 4 | 23 | 62 | 13.8 | - | 7.8 | - | - | - | - | - | 373 | 122 | 410 | 5 | 5 | 280 | .0 | 1190 | - |
| 4 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 4 | 30 | 62 | 14.4 | - | 8.0 | - | - | - | - | - | 370 | 124 | 430 | 5 | 3 | 230 | - | 1161 | - |
| 5 | 1 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 5 | 8 | 62 | 15.5 | - | 7.6 | - | - | - | - | - | - | 126 | 380 | - | 5 | - | - | - | *3 |
| 5 | 14 | 62 | 15.5 | - | 7.6 | - | - | - | - | - | 365 | 128 | 455 | 0 | 5 | 255 | .0 | 1239 | - |
| 5 | 15 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *3 |
| 5 | 22 | 62 | 16.1 | - | 7.6 | - | - | - | - | - | 375 | 128 | 470 | 10 | 5 | 255 | - | 1180 | 18 |
| 5 | 28 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | 260 | .0 | 1162 | - |
| 6 | 4 | 62 | 16.6 | - | 7.6 | - | - | - | - | - | 362 | 124 | 450 | - | 5 | 280 | .0 | 1371 | - |
| 6 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 12000 |
| 6 | 12 | 62 | 20.0 | - | 7.8 | - | - | - | - | - | 360 | 120 | 460 | - | 3 | 270 | - | 1095 | 1500 |
| 6 | 18 | 62 | - | - | - | - | - | - | - | - | 350 | - | - | 5 | - | 255 | .0 | 1100 | - |
| 6 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1500 |
| 6 | 25 | 62 | - | - | - | - | - | - | - | - | 360 | - | - | 10 | - | 270 | .0 | 1116 | - |
| 7 | 3 | 62 | 22.2 | - | 7.8 | - | - | - | - | - | 368 | 124 | 455 | 5 | 3 | 225 | - | 1109 | 20 |
| 7 | 10 | 62 | 22.7 | - | 7.4 | - | - | - | - | - | - | 130 | 420 | - | 3 | - | - | - | - |
| 7 | 17 | 62 | 22.7 | - | 7.4 | - | - | - | - | - | 400 | 128 | 420 | 5 | 5 | 260 | - | 1150 | *3 |
| 7 | 23 | 62 | - | - | - | - | - | - | - | - | 370 | - | - | 5 | - | 260 | .0 | 1180 | - |
| 7 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 7 | 31 | 62 | 23.8 | - | 7.5 | - | - | - | - | - | 380 | 124 | 460 | 5 | 5 | 225 | - | 1190 | 47 |
| 8 | 6 | 62 | - | - | - | - | - | - | - | - | 385 | - | - | 5 | - | 250 | .0 | 1180 | - |
| 8 | 14 | 62 | 25.0 | - | 7.6 | - | - | - | - | - | 345 | 118 | 350 | 0 | 5 | 48 | - | 1071 | *30 |
| 8 | 20 | 62 | - | - | - | - | - | - | - | - | 348 | - | - | 5 | - | 295 | .0 | 1090 | - |
| 8 | 28 | 62 | 25.5 | - | 7.2 | - | - | - | - | - | - | 138 | 380 | - | 5 | - | - | - | *3 |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | 360 | - | - | 5 | - | 240 | .1 | 1100 | *3 |
| 9 | 11 | 62 | 24.4 | - | 7.4 | - | - | - | - | - | - | 138 | 410 | - | 5 | - | - | - | - |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | 318 | - | - | 5 | - | 230 | .0 | 1050 | - |
| 9 | 18 | 62 | 25.5 | - | 7.4 | - | - | - | - | - | - | 122 | 380 | - | 5 | - | - | - | 3 |
| 9 | 25 | 62 | 25.5 | - | 7.5 | - | - | - | - | - | - | 114 | 370 | - | 5 | - | - | - | 20 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Colbert, Oklahoma
Operated by U.S. Army Corps of Engineers

| | |
|---|---|
| STATE | Texas |
| MAJOR BASIN | Southwest-Lower Mississipp |
| MINOR BASIN | Lower Red River below Deni |
| STATION LOCATION | Red River at<br>Denison, Texas |

| Day | October | November | December | January | February | March | April | May | June | July | August | Septem |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .121 | 3.990 | 10.300 | .500 | 3.400 | 1.200 | 1.480 | 2.250 | 1.500 | 4.400 | 4.920 | 2.2 |
| 2 | 2.770 | 3.690 | 5.960 | 3.300 | 3.500 | 1.000 | 3.580 | 3.280 | .100 | 5.940 | 3.580 | .2 |
| 3 | 2.860 | 1.770 | 4.740 | 3.100 | 3.320 | .336 | 3.520 | 3.640 | .200 | 5.980 | 4.660 | 1.8 |
| 4 | 2.660 | .432 | 4.880 | 2.410 | .226 | .118 | 3.100 | 2.640 | 7.140 | 6.330 | 2.300 | 4.9 |
| 5 | 2.760 | .666 | 4.880 | 2.770 | .387 | 1.850 | 3.450 | .108 | 11.800 | 7.620 | .208 | 2.5 |
| 6 | 3.510 | 2.930 | 5.150 | .348 | .700 | 1.570 | 4.220 | .095 | 12.200 | 6.080 | 5.510 | 2.4 |
| 7 | 3.340 | 2.990 | 5.320 | .706 | .694 | 1.370 | .341 | 2.560 | 12.200 | 3.760 | 5.860 | 2.7 |
| 8 | 2.530 | 2.380 | 4.530 | 2.420 | .548 | 1.490 | .300 | 2.680 | 12.200 | 1.180 | 5.930 | 3.0 |
| 9 | 3.190 | 1.910 | 3.040 | 4.000 | .788 | 1.720 | 2.700 | 2.500 | 15.000 | 4.790 | 5.780 | .2 |
| 10 | 5.360 | 2.060 | 3.150 | 4.800 | .719 | .143 | 2.240 | 1.940 | 25.800 | 4.780 | 5.660 | 3.4 |
| 11 | 8.960 | 2.640 | 4.630 | 4.200 | .566 | .100 | 3.030 | 1.970 | 37.500 | 4.730 | 2.990 | 4.7 |
| 12 | 10.000 | 2.290 | 4.800 | 3.000 | 4.050 | 2.270 | 2.200 | .109 | 43.200 | 4.880 | 1.830 | 5.1 |
| 13 | 9.870 | 3.770 | 4.800 | .519 | 3.920 | 2.380 | 3.140 | .096 | 43.200 | 4.900 | 5.090 | 5.4 |
| 14 | 9.960 | 4.130 | 4.700 | 1.150 | 3.550 | 2.950 | 3.320 | .115 | 43.200 | 3.820 | 5.360 | 5.6 |
| 15 | 9.450 | 4.240 | 4.600 | 2.140 | 2.070 | 1.870 | 1.100 | 1.360 | 40.800 | .255 | 5.220 | 3.6 |
| 16 | 9.200 | 4.220 | 3.000 | 4.450 | 1.360 | 1.260 | 3.140 | 1.500 | 32.200 | 3.250 | 5.110 | 2.5 |
| 17 | 9.060 | 4.190 | 3.000 | 4.310 | .419 | .132 | 2.460 | 1.530 | 30.200 | 5.220 | 5.430 | 4.7 |
| 18 | 9.790 | .340 | 4.500 | 3.740 | .362 | .107 | 2.370 | 1.500 | 26.500 | 4.810 | 3.160 | 4.6 |
| 19 | 8.680 | .378 | 4.600 | 3.820 | 2.150 | 1.520 | 2.400 | .200 | 20.600 | 5.060 | 1.660 | 5.0 |
| 20 | 5.500 | 3.260 | 4.500 | 4.760 | 2.840 | 1.430 | 2.060 | .156 | 20.600 | 5.260 | 5.260 | 5.1 |
| 21 | 2.870 | 3.360 | 4.500 | 4.250 | 2.960 | 1.750 | .838 | 1.150 | 20.300 | 2.820 | 5.330 | 4.7 |
| 22 | .203 | 6.450 | 4.600 | 3.000 | 2.980 | 1.790 | .534 | .260 | 20.300 | 2.620 | 5.270 | 1.9 |
| 23 | 3.560 | 9.590 | 3.000 | 3.300 | 3.060 | .960 | .204 | 1.280 | 20.300 | 5.010 | 5.340 | .4 |
| 24 | 4.130 | 9.590 | 2.000 | 2.600 | .164 | .102 | 1.620 | .386 | 19.700 | 5.300 | 5.480 | 4.6 |
| 25 | 3.990 | 9.370 | .600 | 3.180 | .110 | .611 | .516 | .232 | 13.900 | 5.280 | 1.650 | 4.3 |
| 26 | 3.980 | 9.150 | 4.600 | 3.340 | 2.630 | 1.480 | .549 | .837 | 10.200 | 4.220 | .165 | 4.6 |
| 27 | 3.700 | 8.270 | 4.700 | 3.400 | 1.540 | 1.190 | .436 | .241 | 6.640 | 2.970 | 4.920 | 5.6 |
| 28 | 1.080 | 8.710 | 4.900 | 3.400 | 2.400 | 1.890 | 2.090 | .281 | 5.320 | 3.760 | 5.130 | 6.5 |
| 29 | .339 | 9.150 | 5.000 | 3.430 | | 1.520 | .420 | .105 | 5.050 | 2.740 | 4.920 | 6.3 |
| 30 | 3.190 | 10.300 | 3.200 | 3.410 | | 1.740 | 2.600 | .600 | 7.280 | 5.460 | 5.320 | 3.5 |
| 31 | 2.620 | | .400 | 3.360 | | .800 | | 2.410 | | 6.990 | 5.440 | |

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**MINOR BASIN** RIO GRANDE /LOWER/ BELOW PECOS RIVER

**STATION LOCATION** RIO GRANDE AT
BROWNSVILLE, TEXAS 71

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 11 | 3 | 61 | 11 | 18 | 3508 | 171 | 52 | 119 | 1 | 10 | 28 | 10 | 3 | 14 | 1 | 6 | 2 | 1 | 4 |
| 2 | 14 | 62 | 3 | 4 | 2460# | 272 | 37 | 235 | 0 | 5 | 22 | 5 | 3 | 13 | 1 | 4 | 1 | 1 | 4 |
| 4 | 7 | 62 | 4 | 25 | 3691 | 187 | 48 | 139 | 3 | 14 | 14 | 4 | 2 | 8 | 0 | 6 | 3 | 1 | 7 |
| 9 | 20 | 62 | 9 | 28 | 5030 | 139 | 44 | 95 | 1 | 12 | 16 | 2 | 2 | 12 | 0 | 5 | 2 | 1 | 7 |

# ESTIMATED

## NATIONAL WATER QUALITY NETWORK

# RADIOACTIVITY DETERMINATIONS

**STATE** TEXAS
**MAJOR BASIN** WESTERN GULF
**MINOR BASIN** RIO GRANDE /LOWER/ BELOW PEC
**STATION LOCATION** RIO GRANDE AT
BROWNSVILLE, TEXAS

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVIT | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμ |
| 10 | 4 | 61 | 10 | 26 | - | - | - | - | - | - | 3 | 26 | 25 | 40 | 28 | 48 | | | | | |
| 10 | 11 | 61 | 10 | 25 | - | - | - | - | - | - | 15 | 26 | 22 | 30 | 37 | 40 | | | | | |
| 10 | 18 | 61 | 10 | 31 | - | - | - | - | - | - | 10 | 21 | 11 | 31 | 21 | 37 | | | | | |
| 11 | 1 | 61 | 11 | 13 | - | - | - | - | - | - | 0 | 26 | 0 | 26 | 0 | 37 | | | | | |
| 11 | 8 | 61 | 11 | 21 | - | - | - | - | - | - | 22 | 27 | 0 | 25 | 22 | 37 | | | | | |
| 11 | 15 | 61 | 11 | 28 | - | - | - | - | - | - | 22 | 19 | 52 | 26 | 74 | 32 | | | | | |
| 11 | 22 | 61 | 12 | 1 | - | - | - | - | - | - | 9 | 21 | 33 | 28 | 42 | 35 | | | | | |
| 11 | 28 | 61 | 12 | 11 | 1 | 2 | 8 | 8 | 9 | 8 | 18 | 26 | 13 | 39 | 31 | 47 | | | | | |
| 12 | 6 | 61 | 12 | 19 | - | - | - | - | - | - | 47 | 29 | 52 | 40 | 99 | 49 | | | | | |
| 12 | 13 | 61 | 12 | 26 | - | - | - | - | - | - | 4 | 25 | 35 | 29 | 39 | 38 | | | | | |
| 12 | 20 | 61 | 1 | 3 | - | - | - | - | - | - | 11 | 27 | 3 | 33 | 14 | 43 | | | | | |
| 12 | 27 | 61 | 1 | 9 | 1 | 2 | 2 | 4 | 3 | 4 | 22 | 20 | 31 | 26 | 53 | 33 | | | | | |
| 1 | 3 | 62 | 1 | 15 | - | - | - | - | - | - | 9 | 21 | 18 | 28 | 27 | 35 | | | | | |
| 1 | 24 | 62 | 2 | 2 | 1 | 1 | 5 | 3 | 6 | 3 | 19 | 14 | 35 | 16 | 54 | 21 | | | | | |
| 2 | 1 | 62 | 2 | 13 | - | - | - | - | - | - | 16 | 21 | 37 | 28 | 53 | 35 | | | | | |
| 2 | 7 | 62 | 2 | 16 | - | - | - | - | - | - | 10 | 9 | 21 | 12 | 31 | 16 | | | | | |
| 2 | 14 | 62 | 3 | 1 | - | - | - | - | - | - | 17 | 20 | 21 | 26 | 38 | 33 | | | | | |
| 2 | 21 | 62 | 3 | 7 | 2 | 2 | 2 | 3 | 4 | 3 | 4 | 21 | 14 | 25 | 18 | 33 | | | | | |
| 2 | 28 | 62 | 3 | 16 | 1 | 3 | 1 | 4 | 2 | 5 | 0 | 16 | 25 | 21 | 25 | 26 | | | | | |
| 3 | 7 | 62 | 3 | 20 | - | - | - | - | - | - | 0 | 20 | 20 | 25 | 20 | 32 | | | | | |
| 3 | 11 | 62 | 3 | 30 | - | - | - | - | - | - | 13 | 22 | 0 | 29 | 13 | 36 | | | | | |
| 3 | 21 | 62 | 4 | 5 | - | - | - | - | - | - | 22 | 25 | 33 | 32 | 55 | 50 | | | | | |
| 3 | 28 | 62 | 4 | 11 | 0 | 2 | 0 | 4 | 0 | 4 | 17 | 20 | 17 | 24 | 34 | 31 | | | | | |
| 4 | 5 | 62 | 6 | 13 | - | - | - | - | - | - | 317 | 58 | 101 | 50 | 418 | 77 | | | | | |
| 4 | 12 | 62 | 4 | 27 | - | - | - | - | - | - | 3 | 20 | 27 | 30 | 30 | 36 | | | | | |
| 4 | 19 | 62 | 5 | 22 | - | - | - | - | - | - | 8 | 34 | 5 | 49 | 13 | 60 | | | | | |
| 4 | 26 | 62 | 6 | 1 | 0 | 2 | 2 | 3 | 2 | 4 | 0 | 21 | 32 | 25 | 32 | 33 | | | | | |
| 5 | 4 | 62 | 6 | 21 | - | - | - | - | - | - | 22 | 26 | 13 | 27 | 35 | 37 | | | | | |
| 5 | 10 | 62 | 6 | 20 | - | - | - | - | - | - | 7 | 30 | 29 | 34 | 36 | 45 | | | | | |
| 5 | 24 | 62 | 6 | 29 | - | - | - | - | - | - | 0 | 15 | 18 | 17 | 18 | 23 | | | | | |
| 5 | 31 | 62 | 7 | 3 | 8 | 7 | 3 | 4 | 11 | 8 | 37 | 31 | 7 | 24 | 44 | 39 | | | | | |
| 6 | 7 | 62 | 7 | 10 | - | - | - | - | - | - | 12 | 22 | 27 | 28 | 39 | 36 | | | | | |
| 6 | 14 | 62 | 8 | 14 | - | - | - | - | - | - | 15 | 22 | 16 | 29 | 31 | 36 | | | | | |
| 6 | 21 | 62 | 7 | 18 | - | - | - | - | - | - | 0 | 18 | 15 | 25 | 15 | 31 | | | | | |
| 6 | 28 | 62 | 7 | 25 | 8 | 11 | 3 | 3 | 11 | 11 | 19 | 39 | 30 | 26 | 49 | 47 | | | | | |
| 7 | 6 | 62 | 8 | 7 | 0 | 1 | 3 | 3 | 3 | 3 | 12 | 52 | 55 | 68 | 67 | 86 | | | | | |
| 7 | 23 | 62 | 8 | 21 | 0 | 2 | 0 | 2 | 0 | 3 | 20 | 26 | 37 | 34 | 57 | 43 | | | | | |
| 7 | 31 | 62 | 8 | 22 | - | - | - | - | - | - | 0 | 35 | 8 | 32 | 8 | 47 | | | | | |
| 8 | 6 | 62 | 10 | 12 | 0 | 2 | 2 | 6 | 2 | 6 | 23 | 28 | 22 | 38 | 45 | 47 | | | | | |
| 8 | 20 | 62 | 9 | 6 | - | - | - | - | - | - | 14 | 26 | 33 | 34 | 47 | 43 | | | | | |
| 8 | 27 | 62 | 9 | 17 | - | - | - | - | - | - | 11 | 63 | 102 | 82 | 113 | 103 | | | | | |

**STATION LOCATION** RIO GRANDE AT
BROWNSVILLE, TEXAS 71

| DATE SAMPLE TAKEN | | | DATE OF DETERMINATION | | RADIOACTIVITY IN WATER | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 9 | 5 | 62 | 10 | 4 | - | - | - | - | - | - | 5 | 26 | 16 | 40 | 21 | 48 | | | | | | |
| 9 | 17 | 62 | 10 | 9 | - | - | - | - | - | - | 0 | 29 | 17 | 37 | 17 | 47 | | | | | | |
| 9 | 24 | 62 | 10 | 24 | - | - | - | - | - | - | 7 | 22 | 18 | 27 | 25 | 35 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** TEXAS
**MAJOR BASIN** WESTERN GULF
**MINOR BASIN** RIO GRANDE /LOWER/ BELOW PECOS RIVER
**STATION LOCATION** RIO GRANDE AT
BROWNSVILLE, TEXAS 71

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE - GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 4 | 61 | 8800 | 230 | 0 | 970 | 100 | 330 | 0 | 930 | 6210 | 100 | 310 | 92 | 4 | 68 | 3 | 74 | 3 | 88 | 3 | 97 | 2 | 98 | 2 | 78 | 2 | 38 | 2 | 35 | 1 | 75 | 1 |
| 10 | 18 | 61 | 4500 | 930 | 20 | 310 | 140 | 250 | 40 | 270 | 2480 | 0 | 80 | 92 | 4 | 3 | 2 | 1 | 2 | 88 | 1 | | | | | | | | | | | | |
| 11 | 8 | 61 | 6300 | 40 | 0 | 890 | 20 | 1240 | 20 | 480 | 3600 | 40 | 60 | 51 | 3 | 89 | 3 | 88 | 3 | 38 | 2 | 92 | 2 | 68 | 2 | 74 | 1 | 78 | 1 | | | | |
| 11 | 21 | 61 | 10000 | 700 | 60 | 1700 | 0 | 440 | 20 | 890 | 6150 | 40 | 270 | 92 | 6 | 88 | 3 | 38 | 3 | 1 | 2 | 55 | 1 | 44 | 1 | 25 | 1 | | | | | | |
| 12 | 6 | 61 | 23000 | 4030 | 90 | 3690 | 0 | 680 | 20 | 1370 | 13100 | 200 | 1550 | 92 | 6 | 1 | 5 | 25 | 4 | 88 | 4 | 3 | 4 | 68 | 3 | 89 | 2 | 38 | 2 | 74 | 2 | 44 | 2 |
| 12 | 20 | 61 | 5000 | 380 | 20 | 1600 | 0 | 430 | 0 | 650 | 1960 | 180 | 140 | 83 | 4 | 98 | 3 | 38 | 3 | 25 | 2 | 71 | 2 | 51 | 2 | 68 | 1 | 92 | 1 | 3 | 1 | | |
| 1 | 3 | 62 | 3200 | 120 | 0 | 690 | 0 | 0 | 0 | 250 | 2110 | 0 | 330 | 88 | 3 | 83 | 2 | 38 | 2 | 87 | 1 | 92 | 1 | | | | | | | | | | |
| 1 | 18 | 62 | 800 | 70 | 0 | 50 | 0 | 90 | 140 | 140 | 320 | 50 | 50 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 7 | 62 | 1500 | 50 | 20 | 140 | 0 | 110 | 0 | 250 | 900 | 0 | 200 | 84 | 3 | | | | | | | | | | | | | | | | | | |
| 2 | 21 | 62 | 3000 | 110 | 0 | 800 | 0 | 160 | 0 | 50 | 1850 | 20 | 200 | 88 | 3 | 38 | 2 | 83 | 2 | | | | | | | | | | | | | | |
| 3 | 7 | 62 | 19400 | 80 | 80 | 1800 | 0 | 580 | 80 | 750 | 16020 | 0 | 410 | 84 | 7 | 38 | 3 | 51 | 2 | 45 | 1 | 44 | 1 | 25 | 1 | | | | | | | | |
| 3 | 21 | 62 | 11200 | 70 | 20 | 970 | 0 | 230 | 50 | 270 | 9590 | 70 | 610 | 88 | 3 | 84 | 2 | 38 | 2 | 92 | 2 | 33 | 1 | 51 | 1 | 83 | 1 | 87 | 1 | | | | |
| 4 | 5 | 62 | 5400 | 580 | 0 | 1280 | 0 | 120 | 40 | 500 | 2860 | 40 | 120 | 83 | 4 | 84 | 3 | 25 | 3 | 9 | 2 | 38 | 1 | 30 | 1 | 92 | 1 | | | | | | |
| 4 | 19 | 62 | 19600 | 380 | 300 | 6710 | 170 | 0 | 130 | 930 | 10970 | 550 | 1220 | 92 | 6 | 40 | 4 | 38 | 3 | 44 | 3 | 35 | 3 | 25 | 2 | 30 | 2 | 44 | 2 | 45 | 2 | 88 | 2 |
| 5 | 10 | 62 | 12000 | 370 | 40 | 3390 | 0 | 250 | 290 | 1040 | 6580 | 210 | 620 | 84 | 4 | 71 | 3 | 88 | 3 | 40 | 3 | 38 | 3 | 44 | 2 | 3 | 2 | 61 | 1 | 25 | 1 | 45 | 1 |
| 5 | 24 | 62 | 18500 | 340 | 210 | 7470 | 0 | 380 | 0 | 4010 | 6080 | 340 | 1060 | 40 | 5 | 83 | 5 | 68 | 4 | 71 | 4 | 38 | 4 | 92 | 3 | 45 | 3 | 88 | 3 | 87 | 3 | 35 | 2 |
| 6 | 7 | 62 | 4700 | 350 | 0 | 1950 | 0 | 390 | 0 | 540 | 1490 | 40 | 80 | 38 | 3 | 84 | 3 | 35 | 2 | 88 | 2 | 68 | 2 | 40 | 1 | 71 | 1 | 3 | 1 | 57 | 1 | 51 | 1 |
| 6 | 21 | 62 | 15400 | 340 | 80 | 5060 | 0 | 170 | 0 | 3630 | 6120 | 380 | 930 | 38 | 5 | 88 | 5 | 68 | 5 | 83 | 4 | 40 | 2 | 71 | 2 | 1 | 1 | | | | | | |
| 7 | 18 | 62 | 8400 | 220 | 90 | 1150 | 0 | 200 | 0 | 110 | 6660 | 70 | 3710 | 76 | 5 | 88 | 4 | 25 | 1 | 38 | 1 | 44 | 1 | 83 | 1 | 51 | 1 | 92 | 1 | 1 | 1 | | |
| 8 | 6 | 62 | 7300 | 480 | 0 | 520 | 40 | 60 | 0 | 250 | 5920 | 80 | 290 | 84 | 6 | 3 | 2 | 68 | 1 | 38 | 1 | | | | | | | | | | | | |
| 8 | 20 | 62 | 9000 | 350 | 170 | 1930 | 210 | 190 | 0 | 580 | 5590 | 40 | 210 | 92 | 6 | 30 | 2 | 25 | 2 | 3 | 2 | 38 | 2 | 68 | 1 | 71 | 1 | 44 | 1 | 40 | 1 | 50 | 1 |
| 9 | 5 | 62 | 26600 | 760 | 5610 | 3630 | 40 | 0 | 0 | 2030 | 14520 | 510 | 1060 | 76 | 6 | 16 | 6 | 92 | 5 | 68 | 4 | 25 | 4 | 88 | 3 | 5 | 2 | 30 | 2 | 26 | 2 | 44 | 2 |
| 9 | 17 | 62 | 5000 | 1510 | 20 | 920 | 0 | 140 | 0 | 110 | 2300 | 110 | 3650 | 3 | 4 | 92 | 4 | 35 | 1 | 38 | 1 | 25 | 1 | 26 | 1 | 88 | 1 | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 4 | 61 | | | | | | | | | | 0 | 0 | 14 | 2 | 1 | 11 | 1 | | | | | | | 1 | | | | | | | 0 | 0 |
| 10 | 18 | 61 | 89 | 77 | 70 | 4 | 26 | 3 | 71 | 3 | 13 | 0 | 20 | 1020 | 3 | 7 | 11 | 6 | 22 | 5 | 17 | 5 | 2 | 4 | 2 | | | | | | | 0 | 0 |
| 11 | 8 | 61 | 75 | 20 | 26 | 11 | 89 | 11 | 56 | 6 | 52 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 21 | 61 | 89 | 82 | 70 | 7 | 71 | 6 | 26 | 2 | 3 | 0 | 0 | 11 | 17 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 6 | 61 | 89 | 63 | 75 | 4 | 71 | 4 | 26 | 4 | 25 | 320 | 0 | 226 | 21 | 5 | 17 | 4 | 11 | 3 | 22 | 1 | 18 | 1 | 3 | | | | | | | 1 | 0 |
| 12 | 20 | 61 | 38 | 41 | 70 | 16 | 71 | 8 | 89 | 6 | 29 | 160 | 0 | 26 | 21 | 3 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 3 | 62 | 70 | 25 | 38 | 15 | 47 | 10 | 5 | 5 | 45 | 0 | 20 | 135 | 21 | 5 | 17 | 1 | | | | | | | 1 | | | | | | | 0 | 0 |
| 1 | 18 | 62 | 89 | 61 | 47 | 10 | 38 | 6 | 92 | 6 | 17 | 0 | 20 | 43 | 21 | 3 | 17 | 2 | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 7 | 62 | 47 | 56 | 92 | 5 | 36 | 4 | 74 | 3 | 32 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 21 | 62 | 38 | 13 | 70 | 13 | 80 | 8 | 82 | 8 | 58 | 20 | 0 | 105 | 21 | 5 | 17 | 1 | | | | | | | 4 | 50 | 1 | | | | | 0 | 0 |
| 3 | 7 | 62 | 47 | 93 | 80 | 3 | 92 | 1 | 97 | 1 | 2 | 0 | 0 | 22 | 11 | 2 | 17 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 21 | 62 | 47 | 26 | 89 | 20 | 38 | 6 | 71 | 5 | 43 | 0 | 0 | 75 | 11 | 4 | 17 | 2 | 21 | 2 | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 5 | 62 | 38 | 21 | 27 | 20 | 47 | 12 | 89 | 10 | 37 | 0 | 0 | 7 | | | | | | | | | | | 6 | 50 | 2 | | | | | 0 | 0 |
| 4 | 19 | 62 | 91 | 30 | 38 | 11 | 80 | 8 | 47 | 8 | 43 | 0 | 0 | 481 | 21 | 7 | 17 | 4 | 46 | 1 | | | | | 3 | 50 | 1 | | | | | 1 | 0 |
| 5 | 10 | 62 | 47 | 69 | 80 | 11 | 65 | 4 | 6 | 2 | 14 | 40 | 0 | 84 | 21 | 3 | 11 | 3 | 17 | 2 | | | | | 7 | 50 | 1 | | | | | 0 | 1 |
| 5 | 24 | 62 | 38 | 31 | 47 | 22 | 91 | 15 | 26 | 2 | 30 | 0 | 10 | 36 | 21 | 2 | 11 | 2 | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 7 | 62 | 47 | 54 | 26 | 8 | 38 | 6 | 80 | 4 | 28 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 21 | 62 | 47 | 60 | 70 | 12 | 38 | 7 | 27 | 5 | 16 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 18 | 62 | 8 | 33 | 67 | 29 | 26 | 14 | 71 | 9 | 15 | 0 | 10 | 171 | 2 | 6 | | | | | | | | | 4 | 50 | 1 | | | | | 0 | 0 |
| 8 | 6 | 62 | 47 | 95 | 27 | 2 | 38 | 1 | 75 | 1 | 1 | 0 | 0 | 216 | 11 | 6 | 17 | 2 | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 89 | 90 | 92 | 3 | 38 | 2 | 70 | 1 | 4 | 0 | 0 | 111 | 11 | 3 | 17 | 3 | 22 | 3 | 2 | 2 | | | 6 | 50 | 2 | | | | | 0 | 0 |
| 9 | 5 | 62 | 8 | 58 | 89 | 25 | 92 | 4 | 26 | 3 | 10 | 0 | 0 | 1120 | 46 | 8 | 2 | 5 | 22 | 5 | 18 | 3 | 11 | 2 | 3 | 50 | 1 | | | | | 0 | 0 |
| 9 | 17 | 62 | 89 | 41 | 8 | 24 | 92 | 11 | 91 | 7 | 17 | 0 | 0 | 97 | 2 | 5 | 18 | 2 | | | | | | | 0 | | | | | | | 0 | 0 |

**MINOR BASIN** RIO GRANDE /LOWER/ BELOW PECOS RIVER

**STATION LOCATION** RIO GRANDE AT
BROWNSVILLE, TEXAS 71

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 4 | 61 | 20.0 | 8.4 | 7.7 | 1.6 | - | - | - | - | 200 | 100 | 276 | - | 55 | - | - | - | 910 |
| 10 | 11 | 61 | 29.0 | 8.0 | 7.4 | 1.3 | - | - | - | - | 205 | 150 | 336 | - | 45 | - | - | - | 110 |
| 10 | 18 | 61 | 24.0 | 8.0 | 8.4 | 1.1 | - | - | - | - | 320 | 180 | 316 | - | 55 | 360 | .5 | - | 40 |
| 10 | 25 | 61 | 25.0 | 8.7 | 8.4 | 1.4 | - | - | - | - | 235 | 150 | 396 | - | 50 | 300 | - | - | - |
| 11 | 1 | 61 | 27.0 | 8.5 | 8.4 | 1.2 | - | - | - | - | 200 | 170 | 264 | - | 165 | 200 | - | - | 1500 |
| 11 | 8 | 61 | 20.3 | 9.0 | 7.1 | 1.5 | - | - | - | - | 135 | 120 | 252 | - | 180 | 140 | - | - | 2500 |
| 11 | 15 | 61 | 22.0 | 9.2 | 8.4 | 1.4 | - | - | - | - | 200 | 150 | 348 | 5 | 50 | - | - | 985 | 600 |
| 11 | 22 | 61 | 26.3 | 9.8 | 8.2 | 1.4 | - | - | - | - | 165 | 140 | 336 | - | 37 | - | - | - | 500 |
| 11 | 29 | 61 | 21.3 | 9.3 | 8.2 | 1.2 | - | - | - | - | 330 | 140 | - | - | 54 | 310 | - | 1498 | 550 |
| 12 | 6 | 61 | 23.2 | - | 8.2 | - | - | - | - | - | 340 | 190 | - | 5 | 25 | 290 | - | 1368 | 580 |
| 12 | 13 | 61 | 15.3 | - | 8.2 | - | - | - | - | - | 245 | 140 | - | 5 | 65 | 250 | - | 860 | 410 |
| 12 | 20 | 61 | 18.2 | - | 8.4 | - | - | - | - | - | 225 | 140 | - | 5 | 20 | - | - | 871 | 1000 |
| 12 | 27 | 61 | 20.5 | - | 8.2 | - | - | - | - | - | 240 | 230 | - | - | 20 | - | - | - | 200 |
| 1 | 3 | 62 | 22.0 | 9.2 | 7.9 | 1.9 | - | - | - | - | 270 | 130 | - | - | 15 | - | - | 767 | 700 |
| 1 | 11 | 62 | 16.5 | 10.0 | 8.0 | 2.0 | - | - | - | - | 160 | 160 | - | - | 50 | - | - | - | *10 |
| 1 | 17 | 62 | 19.5 | 9.4 | 8.2 | 1.6 | - | - | - | - | 165 | 85 | - | - | 50 | - | - | - | - |
| 1 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 800 |
| 1 | 24 | 62 | 21.5 | 9.2 | 7.8 | 1.3 | - | - | - | - | 130 | 100 | - | 5 | 90 | - | - | 551 | 1500 |
| 2 | 1 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 80 |
| 2 | 2 | 62 | 26.5 | 8.2 | 8.2 | 1.0 | - | - | - | - | 155 | 50 | - | - | 40 | - | - | 662 | - |
| 2 | 7 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 730 |
| 2 | 8 | 62 | 25.5 | 8.4 | 8.2 | 1.2 | - | - | - | - | 130 | 40 | - | - | 67 | - | - | 552 | - |
| 2 | 14 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | - | - | 260 |
| 2 | 15 | 62 | 23.5 | 8.0 | 8.2 | .9 | - | - | - | - | 140 | 50 | - | - | 56 | - | - | - | - |
| 2 | 21 | 62 | 25.5 | 8.0 | 8.2 | 1.0 | - | - | - | - | 155 | 40 | - | - | 40 | - | - | - | 12000 |
| 2 | 22 | 62 | - | - | - | - | 15 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 28 | 62 | 19.5 | 8.4 | 8.4 | .8 | - | - | - | - | 180 | 30 | - | 5 | 30 | - | - | 726 | 230 |
| 3 | 7 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 20 |
| 3 | 8 | 62 | 21.5 | 9.0 | 8.2 | 1.5 | - | - | - | - | 195 | 60 | - | - | 65 | - | - | - | - |
| 3 | 14 | 62 | 19.5 | 8.9 | 8.2 | 1.0 | - | - | - | - | 250 | 55 | - | 0 | 45 | - | - | 922 | 120 |
| 3 | 21 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 |
| 3 | 28 | 62 | 24.5 | 7.8 | 8.2 | 1.8 | - | - | - | - | 270 | 210 | - | 10 | 17 | - | - | 847 | 40 |
| 4 | 4 | 62 | 22.5 | 8.3 | 8.1 | 1.1 | - | - | - | - | 380 | 140 | - | - | 60 | - | - | - | - |
| 4 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 990 |
| 4 | 12 | 62 | 26.5 | 7.8 | 8.3 | .8 | - | - | - | - | 105 | 100 | - | 5 | 25 | - | - | 917 | *100 |
| 4 | 19 | 62 | 24.5 | 8.2 | 8.4 | 1.2 | - | - | - | - | 360 | 110 | - | - | 22 | - | - | - | 900 |
| 4 | 26 | 62 | 29.5 | 8.9 | 8.3 | 1.0 | - | - | - | - | 300 | 120 | - | - | 40 | - | - | 627 | 3000 |
| 5 | 4 | 62 | 26.5 | 7.4 | 8.3 | 1.5 | - | - | - | - | 130 | 130 | - | 10 | 105 | - | - | 420 | 200 |
| 5 | 10 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | - | 801 | *100 |

MINOR BASIN RIO GRANDE /LOWER/ BELOW PECOS RIVER

STATION LOCATION RIO GRANDE AT

BROWNSVILLE, TEXAS 71

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 5 | 17 | 62 | 27.5 | 8.8 | 8.3 | .8 | - | - | - | - | 250 | 145 | - | - | 70 | - | - | - | - |
| 5 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | - | 731 | 800 |
| 5 | 31 | 62 | - | - | - | - | - | - | - | - | - | - | - | 0 | - | - | - | 648 | - |
| 6 | 7 | 62 | 29.5 | 8.1 | 8.3 | .9 | - | - | - | - | 130 | 120 | - | 0 | 75 | - | - | 741 | - |
| 6 | 14 | 62 | 30.5 | 8.0 | 8.3 | .8 | - | - | - | - | 140 | - | - | 5 | 45 | - | - | 627 | 600 |
| 6 | 21 | 62 | 30.5 | 7.2 | 8.3 | 1.1 | - | - | - | - | 130 | 110 | - | 0 | 42 | - | - | 675 | 200 |
| 6 | 28 | 62 | 31.0 | 7.5 | 8.3 | .8 | - | - | - | - | 130 | 110 | 56 | 5 | 55 | - | - | 721 | 1400 |
| 7 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | - | 2250 | - |
| 7 | 18 | 62 | - | 7.8 | 8.3 | 1.0 | - | - | - | - | 750 | 140 | 636 | - | 18 | - | - | - | 200 |
| 7 | 23 | 62 | 30.0 | 7.7 | 8.3 | 1.1 | - | - | - | - | 300 | 150 | 392 | 0 | 23 | - | - | 1100 | 680 |
| 7 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1000 | 280 |
| 8 | 6 | 62 | - | 7.0 | 8.1 | .9 | - | - | - | - | 300 | 130 | 412 | 0 | *25 | 315 | .0 | 1300 | 420 |
| 8 | 21 | 62 | - | 7.0 | 8.2 | .8 | - | - | - | - | 260 | 130 | 370 | 5 | 60 | - | - | 985 | 140 |
| 8 | 14 | 62 | - | 1.4 | 8.3 | - | - | - | - | - | 320 | 110 | - | - | 35 | 310 | - | - | - |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | - | 1582 | 140 |
| 9 | 4 | 62 | - | 7.0 | 8.2 | .9 | - | - | - | - | 390 | 134 | 460 | - | 65 | - | - | - | 7000 |
| 9 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | 0 | - | 280 | .0 | 1305 | - |
| 9 | 17 | 62 | - | 7.0 | 8.2 | 1.0 | - | - | - | - | 380 | 148 | 430 | - | 50 | - | - | - | 700 |
| 9 | 24 | 62 | - | 7.5 | 8.2 | .8 | - | - | - | - | 160 | 112 | 230 | - | 30 | 165 | .0 | 700 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Brownsville, Texas
Supplied by International Boundary and Water Commission

| | |
|---|---|
| STATE | Texas |
| MAJOR BASIN | Western Gulf |
| MINOR BASIN | Rio Grande/Lower/below Pec |
| STATION LOCATION | Rio Grande at<br>Brownsville, Texas |

| Day | October | November | December | January | February | March | April | May | June | July | August | Septe |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.297 | 1.718 | .198 | .116 | .145 | .150 | 1.007 | .388 | .365 | 1.128 | .133 | .3 |
| 2 | 2.268 | .623 | .159 | .167 | .245 | .128 | .955 | .464 | .114 | .768 | .157 | .3 |
| 3 | 2.017 | .278 | .170 | .337 | .299 | .272 | 1.027 | .814 | .545 | .374 | .211 | .2 |
| 4 | 1.807 | .202 | .227 | .333 | .588 | .292 | .871 | 1.108 | 1.578 | .305 | .160 | .2 |
| 5 | 1.024 | .308 | .289 | .183 | 1.045 | .272 | .731 | 1.028 | 1.543 | .451 | .190 | .2 |
| 6 | .452 | .760 | .683 | .150 | .932 | .201 | 1.037 | .531 | .505 | .546 | .192 | .1 |
| 7 | .296 | 1.167 | 1.937 | .210 | .418 | .135 | .884 | .280 | .158 | .487 | .157 | .1 |
| 8 | .239 | 1.547 | 1.947 | .225 | .146 | .078 | .653 | .342 | .055 | .324 | .121 | .1 |
| 9 | .369 | 1.427 | .875 | .238 | .111 | .077 | .629 | .759 | .853 | .254 | .121 | .1 |
| 10 | .477 | .939 | .353 | .143 | .110 | .144 | .500 | .485 | .739 | .325 | .121 | .1 |
| 11 | .426 | .512 | .223 | .346 | .198 | .160 | .180 | .242 | .666 | .279 | .185 | .1 |
| 12 | .298 | .317 | .483 | .620 | .231 | .142 | .123 | .215 | .722 | .410 | .574 | .1 |
| 13 | .264 | .378 | .639 | .462 | .265 | .333 | .246 | .299 | .540 | .426 | .639 | .1 |
| 14 | .407 | .510 | 1.122 | .198 | .319 | .330 | .236 | .257 | .349 | .327 | .565 | .1 |
| 15 | .642 | .509 | 1.168 | .142 | .232 | .269 | .136 | .260 | .230 | .339 | .261 | .0 |
| 16 | .548 | .265 | .831 | .096 | .180 | .188 | .357 | .172 | .209 | .736 | .182 | .0 |
| 17 | .298 | .237 | .496 | .061 | .143 | .519 | .454 | .118 | .154 | .689 | .155 | .1 |
| 18 | .205 | .205 | .326 | .122 | .146 | .603 | .186 | .112 | .294 | .319 | .102 | .1 |
| 19 | .184 | .201 | .158 | .171 | .231 | .474 | .079 | .101 | .623 | .204 | .218 | .1 |
| 20 | .159 | .483 | .338 | .145 | .313 | .389 | .167 | .100 | .648 | .176 | .236 | .1 |
| 21 | .143 | .552 | .243 | .190 | .200 | .353 | .309 | .081 | .330 | .184 | .257 | .1 |
| 22 | .150 | .303 | .167 | .526 | .153 | .305 | .184 | .101 | .224 | .233 | .240 | .1 |
| 23 | .510 | .222 | .162 | .858 | .131 | .209 | .096 | .185 | .228 | .456 | .253 | .1 |
| 24 | .915 | .250 | .117 | .710 | .144 | .172 | .164 | .138 | .426 | .284 | .189 | .1 |
| 25 | .659 | .383 | .094 | .369 | .249 | .157 | .548 | .095 | .770 | .365 | .165 | .1 |
| 26 | .266 | .602 | .197 | .178 | .386 | .178 | .324 | .244 | 1.356 | .368 | .148 | .1 |
| 27 | .148 | .500 | .308 | .163 | .353 | .135 | .178 | .251 | 1.106 | .220 | .166 | .1 |
| 28 | .200 | .419 | .237 | .194 | .200 | .103 | .277 | .214 | 1.179 | .192 | .175 | .1 |
| 29 | .670 | .309 | .126 | .224 | | .117 | .439 | .690 | 1.629 | .191 | .158 | .1 |
| 30 | 1.954 | .256 | .104 | .837 | | .115 | .407 | 1.245 | 1.469 | .171 | .194 | .1 |
| 31 | 2.478 | | .107 | .475 | | .312 | | .903 | | .130 | .375 | |

Computed as being sum of (1) Flow at Lower Brownsville Station, (2) City of Matamoros Diversion and (3) average daily Diversion at El Jardin Pump.

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

RIO GRANDE /LOWER/ BELOW PECOS RIVER

**STATION LOCATION** RIO GRANDE AT

LAREDO, TEXAS

45

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLOROFORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGENATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 25 | 61 | 10 | 30 | 5365 | 58 | 14 | 44 | 0 | 4 | 5 | 2 | 0 | 3 | 0 | 2 | 1 | 1 | 1 |
| 11 | 15 | 61 | 11 | 24 | 3715 | 99 | 20 | 79 | 0 | 3 | 12 | 4 | 1 | 7 | 0 | 2 | 1 | 0 | 2 |
| 12 | 12 | 61 | 1 | 2 | 2634 | 103 | 15 | 88 | 0 | 3 | 8 | 2 | 1 | 5 | 0 | 2 | 1 | 1 | 0 |
| 1 | 20 | 62 | 2 | 3 | 1052 | 205 | 23 | 182 | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 15 | 62 | 2 | 27 | 4551 | 85 | 12 | 73 | 1 | 3 | 4 | 1 | 1 | 2 | 0 | 2 | 1 | 0 | 1 |
| 3 | 26 | 62 | 4 | 3 | 7555 | 63 | 17 | 46 | 1 | 5 | 5 | 1 | 0 | 4 | 0 | 2 | 1 | 0 | 3 |
| 4 | 20 | 62 | 5 | 1 | 3039 | 177 | 68 | 109 | 1 | 21 | 19 | 2 | 2 | 14 | 1 | 8 | 5 | 1 | 13 |
| 5 | 18 | 62 | 5 | 25 | 5185 | 80 | 19 | 61 | 1 | 6 | 6 | 1 | 1 | 4 | 0 | 2 | 1 | 1 | 2 |
| 6 | 26 | 62 | 7 | 3 | 4824 | 112 | 53 | 59 | 1 | 15 | 15 | 3 | 1 | 9 | 2 | 6 | 4 | 1 | 11 |
| 7 | 19 | 62 | 7 | 24 | 4247 | 84 | 29 | 55 | 0 | 7 | 12 | 3 | 1 | 7 | 1 | 3 | 1 | 0 | 6 |
| 8 | 14 | 62 | 8 | 21 | 4332 | 116 | 44 | 72 | 1 | 8 | 19 | 7 | 1 | 11 | 0 | 5 | 2 | 1 | 8 |
| 9 | 6 | 62 | 9 | 10 | 1771 | 179 | 36 | 143 | 0 | 9 | 14 | 3 | 1 | 10 | 0 | 4 | 2 | 1 | 6 |

**STATION LOCATION** RIO GRANDE AT
LAREDO, TEXAS

45

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 3 | 61 | 10 | 19 | - | - | - | - | - | - | 7 | 15 | 15 | 14 | 22 | 21 | | | | | | |
| 10 | 10 | 61 | 10 | 24 | - | - | - | - | - | - | 18 | 18 | 12 | 15 | 30 | 24 | | | | | | |
| 10 | 17 | 61 | 11 | 1 | 3 | 3 | 3 | 3 | 6 | 4 | 13 | 11 | 17 | 11 | 30 | 16 | | | | | | |
| 10 | 24 | 61 | 11 | 3 | - | - | - | - | - | - | 8 | 11 | 18 | 14 | 26 | 18 | | | | | | |
| 10 | 31 | 61 | 11 | 9 | - | - | - | - | - | - | 45 | 21 | 31 | 15 | 76 | 26 | | | | | | |
| 11 | 7 | 61 | 11 | 17 | - | - | - | - | - | - | 75 | 21 | 42 | 16 | 117 | 28 | | | | | | |
| 11 | 14 | 61 | 11 | 28 | - | - | - | - | - | - | 43 | 18 | 22 | 15 | 65 | 23 | | | | | | |
| 11 | 21 | 61 | 12 | 4 | 2 | 2 | 3 | 3 | 5 | 4 | 15 | 10 | 17 | 12 | 32 | 16 | | | | | | |
| 11 | 28 | 61 | 12 | 6 | - | - | - | - | - | - | 22 | 11 | 40 | 15 | 62 | 19 | | | | | | |
| 12 | 5 | 61 | 12 | 14 | - | - | - | - | - | - | 13 | 9 | 46 | 12 | 59 | 15 | | | | | | |
| 12 | 12 | 61 | 12 | 26 | - | - | - | - | - | - | 3 | 12 | 11 | 15 | 14 | 19 | | | | | | |
| 12 | 19 | 61 | 1 | 4 | 0 | 1 | 7 | 4 | 7 | 4 | 9 | 8 | 18 | 12 | 27 | 14 | | | | | | |
| 12 | 26 | 61 | 1 | 3 | - | - | - | - | - | - | 12 | 12 | 18 | 16 | 30 | 20 | | | | | | |
| 1 | 2 | 62 | 1 | 15 | - | - | - | - | - | - | 17 | 17 | 21 | 20 | 38 | 26 | | | | | | |
| 1 | 9 | 62 | 1 | 22 | - | - | - | - | - | - | 2 | 22 | 27 | 26 | 29 | 34 | | | | | | |
| 1 | 16 | 62 | 1 | 29 | 1 | 2 | 2 | 3 | 3 | 4 | 0 | 16 | 4 | 18 | 4 | 24 | | | | | | |
| 1 | 23 | 62 | 2 | 2 | - | - | - | - | - | - | 0 | 11 | 13 | 16 | 13 | 19 | | | | | | |
| 1 | 30 | 62 | 2 | 12 | - | - | - | - | - | - | 13 | 22 | 23 | 27 | 36 | 35 | | | | | | |
| 2 | 6 | 62 | 2 | 16 | - | - | - | - | - | - | 0 | 23 | 4 | 26 | 4 | 35 | | | | | | |
| 2 | 13 | 62 | 2 | 27 | - | - | - | - | - | - | 14 | 30 | 25 | 34 | 39 | 45 | | | | | | |
| 2 | 20 | 62 | 3 | 8 | 0 | 3 | 0 | 3 | 0 | 4 | 10 | 17 | 29 | 20 | 39 | 26 | | | | | | |
| 2 | 27 | 62 | 3 | 12 | - | - | - | - | - | - | 4 | 17 | 26 | 20 | 30 | 26 | | | | | | |
| 3 | 6 | 62 | 3 | 19 | - | - | - | - | - | - | 1 | 17 | 0 | 19 | 1 | 25 | | | | | | |
| 3 | 13 | 62 | 3 | 26 | - | - | - | - | - | - | 5 | 16 | 20 | 20 | 25 | 26 | | | | | | |
| 3 | 20 | 62 | 4 | 3 | 1 | 2 | 3 | 4 | 4 | 4 | 30 | 17 | 22 | 19 | 52 | 25 | | | | | | |
| 3 | 27 | 62 | 4 | 12 | - | - | - | - | - | - | 19 | 15 | 24 | 18 | 43 | 23 | | | | | | |
| 4 | 3 | 62 | 4 | 20 | - | - | - | - | - | - | 9 | 20 | 42 | 28 | 51 | 34 | | | | | | |
| 4 | 10 | 62 | 4 | 23 | - | - | - | - | - | - | 41 | 22 | 40 | 27 | 81 | 35 | | | | | | |
| 4 | 17 | 62 | 4 | 30 | 1 | 2 | 3 | 4 | 4 | 4 | 18 | 17 | 48 | 20 | 66 | 26 | | | | | | |
| 4 | 24 | 62 | 5 | 31 | - | - | - | - | - | - | 53 | 34 | 52 | 31 | 105 | 46 | | | | | | |
| 5 | 1 | 62 | 6 | 4 | - | - | - | - | - | - | 347 | 57 | 44 | 16 | 391 | 59 | | | | | | |
| 5 | 8 | 62 | 6 | 21 | - | - | - | - | - | - | 18 | 13 | 49 | 19 | 67 | 23 | | | | | | |
| 5 | 15 | 62 | 6 | 26 | - | - | - | - | - | - | 4 | 29 | 22 | 32 | 26 | 43 | | | | | | |
| 5 | 22 | 62 | 6 | 27 | 0 | 2 | 0 | 2 | 0 | 3 | 7 | 23 | 12 | 26 | 19 | 35 | | | | | | |
| 5 | 29 | 62 | 10 | 11 | - | - | - | - | - | - | 2 | 28 | 12 | 27 | 14 | 39 | | | | | | |
| 6 | 5 | 62 | 7 | 6 | - | - | - | - | - | - | 26 | 11 | 45 | 12 | 71 | 16 | | | | | | |
| 6 | 12 | 62 | 7 | 9 | - | - | - | - | - | - | 75 | 35 | 40 | 15 | 115 | 38 | | | | | | |
| 6 | 19 | 62 | 7 | 18 | 4 | 7 | 2 | 3 | 6 | 8 | 31 | 56 | 27 | 14 | 58 | 58 | | | | | | |
| 6 | 26 | 62 | 7 | 23 | - | - | - | - | - | - | 17 | 11 | 1 | 15 | 18 | 19 | | | | | | |
| 7 | 3 | 62 | 8 | 1 | - | - | - | - | - | - | 107 | 25 | 22 | 17 | 129 | 30 | | | | | | |
| 7 | 10 | 62 | 8 | 17 | - | - | - | - | - | - | 9 | 12 | 35 | 16 | 44 | 20 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** TEXAS

**MAJOR BASIN** WESTERN GULF

**MINOR BASIN** RIO GRANDE /LOWER/ BELOW PECOS RIVER

**STATION LOCATION** RIO GRANDE AT

LAREDO, TEXAS 45

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 7 | 17 | 62 | 8 | 7 | 0 | 2 | 1 | 3 | 1 | 4 | 14 | 21 | 43 | 25 | 57 | 33 | | | | | | |
| 7 | 24 | 62 | 8 | 15 | - | - | - | - | - | - | 723 | 238 | 31 | 16 | 754 | 239 | | | | | | |
| 7 | 31 | 62 | 8 | 23 | - | - | - | - | - | - | 1394 | 234 | 35 | 15 | 1429 | 234 | | | | | | |
| 8 | 7 | 62 | 8 | 23 | - | - | - | - | - | - | 56 | 66 | 13 | 25 | 69 | 71 | | | | | | |
| 8 | 14 | 62 | 8 | 30 | - | - | - | - | - | - | 55 | 34 | 19 | 15 | 74 | 39 | | | | | | |
| 8 | 21 | 62 | 9 | 6 | 1 | 2 | 6 | 4 | 7 | 4 | 23 | 13 | 41 | 16 | 64 | 21 | | | | | | |
| 8 | 28 | 62 | 9 | 17 | - | - | - | - | - | - | 6 | 14 | 27 | 19 | 33 | 24 | | | | | | |
| 9 | 4 | 62 | 9 | 28 | - | - | - | - | - | - | 10 | 10 | 21 | 13 | 31 | 16 | | | | | | |
| 9 | 11 | 62 | 10 | 9 | - | - | - | - | - | - | 159 | 51 | 26 | 15 | 185 | 53 | | | | | | |
| 9 | 18 | 62 | 10 | 10 | 103 | 68 | 4 | 3 | 107 | 68 | 593 | 205 | 38 | 15 | 631 | 206 | | | | | | |
| 9 | 25 | 62 | 10 | 22 | - | - | - | - | - | - | 53 | 21 | 20 | 5 | 73 | 22 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** TEXAS

**MAJOR BASIN** WESTERN GULF

**MINOR BASIN** RIO GRANDE /LOWER/ BELOW PECOS RIVER

**STATION LOCATION** RIO GRANDE AT
LAREDO, TEXAS 45

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 3 | 61 | 1100 | 0 | 0 | 290 | 0 | 170 | 0 | 210 | 390 | 60 | 60 | | | | | | | | | | | | | | | | | | | | |
| 10 | 17 | 61 | 700 | 0 | 0 | 170 | 0 | 290 | 0 | 150 | 150 | 20 | 20 | 59 | 1 | | | | | | | | | | | | | | | | | | |
| 11 | 7 | 61 | 200 | 0 | 0 | 0 | 0 | 20 | 0 | 90 | 130 | 50 | 130 | | | | | | | | | | | | | | | | | | | | |
| 11 | 21 | 61 | 3800 | 0 | 0 | 350 | 0 | 270 | 0 | 2190 | 970 | 600 | 330 | 92 | 3 | 51 | 1 | 69 | 1 | | | | | | | | | | | | | | |
| 12 | 5 | 61 | 4800 | 0 | 0 | 510 | 0 | 580 | 0 | 490 | 3220 | 200 | 2610 | 92 | 5 | 68 | 2 | 51 | 2 | 38 | 2 | 25 | 1 | | | | | | | | | | |
| 12 | 12 | 61 | 3600 | 20 | 0 | 250 | 0 | 110 | 0 | 340 | 2880 | 230 | 1800 | 92 | 4 | 84 | 3 | 88 | 1 | 68 | 1 | | | | | | | | | | | | |
| 1 | 2 | 62 | 6800 | 0 | 0 | 130 | 0 | 40 | 0 | 210 | 6440 | 60 | 500 | 84 | 4 | 88 | 4 | 92 | 4 | 82 | 3 | | | | | | | | | | | | |
| 1 | 16 | 62 | 4800 | 0 | 20 | 20 | 0 | 150 | 0 | 100 | 4510 | 20 | 660 | 84 | 4 | 82 | 4 | 88 | 4 | 92 | 3 | 78 | 2 | | | | | | | | | | |
| 2 | 6 | 62 | 14000 | 500 | 650 | 650 | 0 | 290 | 0 | 1060 | 10870 | 110 | 1100 | 84 | 5 | 82 | 5 | 25 | 3 | 15 | 2 | 4 | 2 | 51 | 1 | | | | | | | | |
| 2 | 20 | 62 | 22300 | 80 | 0 | 750 | 0 | 870 | 40 | 330 | 20200 | 150 | 520 | 84 | 7 | 51 | 3 | 38 | 1 | 68 | 1 | | | | | | | | | | | | |
| 3 | 6 | 62 | 39400 | 0 | 0 | 460 | 0 | 330 | 540 | 210 | 37880 | 40 | 1260 | 84 | 8 | 62 | 2 | 25 | 1 | 68 | 1 | | | | | | | | | | | | |
| 3 | 20 | 62 | 25200 | 80 | 0 | 370 | 0 | 450 | 0 | 210 | 24140 | 0 | 480 | 84 | 7 | 88 | 6 | 52 | 1 | | | | | | | | | | | | | | |
| 4 | 3 | 62 | 42300 | 40 | 0 | 1120 | 0 | 2110 | 460 | 3640 | 34940 | 370 | 1080 | 84 | 8 | 88 | 5 | 68 | 5 | 92 | 4 | 89 | 4 | 87 | 4 | 51 | 4 | 83 | 3 | 79 | 3 | 38 | 3 |
| 4 | 17 | 62 | 5500 | 0 | 0 | 850 | 0 | 750 | 0 | 190 | 3730 | 60 | 620 | 88 | 3 | 89 | 3 | 51 | 3 | 84 | 2 | 87 | 2 | 25 | 1 | 79 | 1 | 86 | 1 | 28 | 1 | | |
| 5 | 8 | 62 | 11400 | 20 | 20 | 610 | 0 | 0 | 20 | 4620 | 6060 | 550 | 680 | 68 | 5 | 71 | 4 | 88 | 4 | 92 | 3 | 82 | 2 | 73 | 2 | 79 | 2 | 38 | 2 | 78 | 2 | 89 | 2 |
| 5 | 22 | 62 | 39500 | 6580 | 0 | 14740 | 0 | 3520 | 210 | 870 | 13620 | 370 | 910 | 3 | 6 | 92 | 6 | 35 | 5 | 51 | 5 | 31 | 4 | 25 | 4 | 32 | 4 | 33 | 4 | 38 | 3 | 68 | 2 |
| 6 | 5 | 62 | 2800 | 0 | 0 | 290 | 0 | 40 | 0 | 390 | 2070 | 40 | 330 | 88 | 3 | 68 | 1 | 87 | 1 | 92 | 1 | 83 | 1 | | | | | | | | | | |
| 6 | 19 | 62 | 2100 | 0 | 0 | 40 | 0 | 0 | 0 | 340 | 1690 | 40 | 510 | 88 | 3 | 84 | 1 | 68 | 1 | | | | | | | | | | | | | | |
| 7 | 3 | 62 | 300 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 290 | 20 | 20 | | | | | | | | | | | | | | | | | | | | |
| 7 | 17 | 62 | 4100 | 0 | 0 | 830 | 0 | 680 | 40 | 290 | 2280 | 120 | 370 | 88 | 4 | 33 | 2 | 87 | 2 | 52 | 2 | 51 | 2 | 68 | 1 | 83 | 1 | | | | | | |
| 8 | 7 | 62 | 1000 | 0 | 0 | 0 | 0 | 150 | 0 | 0 | 870 | 20 | 210 | 88 | 2 | 92 | 1 | | | | | | | | | | | | | | | | |
| 8 | 21 | 62 | 4800 | 0 | 0 | 430 | * | 100 | 0 | 290 | 1160 | 0 | 80 | 50 | 5 | 88 | 3 | 38 | 1 | 68 | 1 | 87 | 1 | | | | | | | | | | |
| 9 | 4 | 62 | 14300 | 80 | 20 | 11570 | 0 | 430 | 0 | 330 | 1820 | 250 | 1160 | 33 | 6 | 32 | 4 | 35 | 3 | 88 | 3 | 25 | 3 | 68 | 2 | 89 | 1 | 51 | 1 | 87 | 1 | 52 | 1 |
| *8 | 21 | 62 | | | | | 2860 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 3 | 61 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 17 | 61 | 68 | 15 | 71 | 15 | 65 | 10 | 55 | 9 | 51 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 7 | 61 | 71 | 14 | 69 | 11 | 68 | 10 | 72 | 7 | 58 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 21 | 61 | 80 | 47 | 71 | 2 | 26 | 8 | 68 | 4 | 29 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 5 | 61 | 91 | 84 | 26 | 5 | 27 | 3 | 47 | 3 | 4 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 12 | 61 | 47 | 65 | 89 | 19 | 26 | 5 | 91 | 3 | 8 | 140 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 47 | 73 | 71 | 11 | 36 | 5 | 89 | 4 | 7 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 16 | 62 | 47 | 91 | 36 | 3 | 71 | 2 | 89 | 2 | 2 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 2 | 6 | 62 | 47 | 40 | 36 | 33 | 89 | 4 | 75 | 3 | 20 | 500 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 20 | 62 | 47 | 97 | 89 | 1 | 26 | 1 | 70 | 1 | | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 6 | 62 | 47 | 97 | 89 | 1 | 26 | 1 | 70 | 1 | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 20 | 62 | 47 | 91 | 71 | 2 | 68 | 1 | 72 | 1 | 5 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 3 | 62 | 47 | 92 | 26 | 2 | 75 | 1 | 89 | 1 | 4 | 80 | 0 | 10 | 17 | 1 | 21 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 17 | 62 | 47 | 78 | 75 | 5 | 71 | 4 | 26 | 2 | 11 | 60 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 8 | 62 | 47 | 57 | 80 | 4 | 36 | 3 | 71 | 3 | 33 | 150 | 10 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 22 | 62 | 89 | 26 | 47 | 13 | 91 | 13 | 16 | 12 | 36 | 0 | 20 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 5 | 62 | 68 | 21 | 89 | 17 | 38 | 12 | 5 | 10 | 40 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 19 | 62 | 68 | 15 | 47 | 8 | 89 | 6 | 38 | 5 | 66 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 3 | 62 | 47 | 12 | 92 | 9 | 41 | 6 | 68 | 5 | 68 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 7 | 17 | 62 | 26 | 24 | 68 | 15 | 47 | 13 | 71 | 9 | 39 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 7 | 62 | 69 | 31 | 92 | 23 | 47 | 8 | 33 | 4 | 34 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 21 | 62 | 26 | 16 | 65 | 6 | 68 | 5 | 71 | 5 | 68 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 71 | 22 | 26 | 17 | 75 | 12 | 72 | 6 | 43 | 0 | 0 | 2060 | 15 | 8 | 17 | 7 | 22 | 6 | 7 | 3 | | | 4 | 50 | 1 | | | | | 0 | 1 |

**MINOR BASIN** RIO GRANDE /LOWER/ BELOW PECOS RIVER

**STATION LOCATION** RIO GRANDE AT

LAREDO, TEXAS 45

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 3 | 61 | 24.0 | - | 8.3 | - | - | - | - | - | 84 | 134 | 246 | - | 630 | 198 | - | - | 2000 |
| 10 | 10 | 61 | 25.2 | - | 8.4 | - | - | - | - | - | 74 | 146 | 236 | - | 1050 | 165 | - | - | 1800 |
| 10 | 17 | 61 | 25.0 | - | 8.4 | - | - | - | - | - | 66 | 140 | 234 | - | 750 | 153 | - | - | 2800 |
| 10 | 24 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 10 | 30 | 61 | - | - | - | - | 14 | - | - | - | - | - | - | - | - | - | - | - | - |
| 10 | 31 | 61 | 24.0 | - | 8.4 | - | - | - | - | - | 68 | 145 | 258 | - | 1320 | 213 | - | - | 6000 |
| 11 | 7 | 61 | 16.0 | - | 8.3 | - | - | - | - | - | 68 | 155 | 250 | 5 | 1140 | 153 | .0 | 509 | 33000 |
| 11 | 14 | 61 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | .1 | 457 | 13000 |
| 11 | 21 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 11 | 25 | 61 | - | - | - | - | 7 | - | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 28 | 61 | 18.0 | - | 8.4 | - | - | - | - | - | 100 | 141 | 264 | - | 164 | 188 | .0 | 547 | 100 |
| 12 | 5 | 61 | 20.0 | - | 8.3 | - | - | - | - | - | 100 | 142 | 262 | - | 107 | 194 | .1 | 599 | 17 |
| 12 | 12 | 61 | 17.0 | - | 8.3 | - | - | - | - | - | 105 | 147 | 272 | - | 169 | 205 | .0 | 598 | 86 |
| 12 | 19 | 61 | 14.0 | - | 8.3 | - | - | - | - | - | 110 | 152 | 282 | - | 183 | 206 | .1 | 606 | *33 |
| 12 | 26 | 61 | 14.0 | - | 8.3 | - | 7 | - | - | - | 110 | 151 | 278 | - | 210 | 170 | .0 | 596 | 110 |
| 1 | 2 | 62 | 11.5 | - | 8.3 | - | - | - | - | - | 110 | 148 | 284 | - | 210 | 169 | .0 | 605 | 150 |
| 1 | 9 | 62 | 12.0 | - | 8.2 | - | - | - | - | - | 115 | 150 | 290 | - | 234 | 182 | .0 | - | 110 |
| 1 | 16 | 62 | 9.0 | - | 8.3 | - | - | - | - | - | 115 | 155 | 290 | - | 130 | 185 | .0 | 678 | *10 |
| 1 | 20 | 62 | - | - | 8.4 | - | 1 | - | - | - | 120 | 144 | 288 | - | 240 | 190 | - | - | 40 |
| 1 | 23 | 62 | 11.0 | - | 8.3 | - | - | - | - | - | 115 | 158 | 300 | - | 130 | 193 | .0 | 639 | - |
| 1 | 30 | 62 | 12.0 | - | 8.3 | - | - | - | - | - | 115 | 154 | 296 | - | 184 | 180 | .1 | 656 | *10 |
| 2 | 13 | 62 | 19.5 | - | 8.4 | - | - | - | - | - | 125 | 135 | 282 | 5 | 252 | 192 | .0 | - | 67 |
| 2 | 20 | 62 | 20.0 | - | 8.4 | - | 11 | - | - | - | 125 | 118 | 270 | - | 306 | 197 | - | - | - |
| 2 | 26 | 62 | 22.0 | - | 8.3 | - | - | - | - | - | 135 | 107 | 262 | - | 282 | 197 | .1 | 658 | - |
| 2 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 190 |
| 3 | 6 | 62 | 16.2 | - | 8.3 | - | - | - | - | - | 140 | 110 | 266 | - | 308 | 200 | .0 | 671 | 280 |
| 3 | 13 | 62 | 19.0 | - | 8.3 | - | - | - | - | - | 140 | 96 | 256 | - | 252 | 194 | - | - | 270 |
| 3 | 20 | 62 | 19.0 | - | 8.3 | - | - | - | - | - | 140 | 121 | 280 | - | 258 | 188 | .0 | 670 | 140 |
| 3 | 27 | 62 | 19.5 | - | 8.4 | - | - | - | - | - | 145 | 115 | 286 | - | 194 | 208 | .0 | 732 | 180 |
| 4 | 3 | 62 | 19.0 | - | 8.3 | - | - | - | - | - | 150 | 105 | 276 | - | 159 | 220 | .0 | 719 | 150 |
| 4 | 10 | 62 | 23.5 | - | 8.3 | - | - | - | - | - | 145 | 127 | 284 | - | 109 | 186 | - | 692 | 150 |
| 4 | 17 | 62 | 24.0 | - | 8.4 | - | 16 | - | - | - | 100 | 130 | 254 | - | 92 | 153 | - | 550 | 33 |
| 4 | 24 | 62 | 23.0 | - | 7.9 | - | - | - | - | - | 132 | 100 | 236 | - | 545 | 158 | - | 657 | 3300 |
| 5 | 1 | 62 | 25.0 | - | 7.8 | - | 31 | - | - | - | 46 | 82 | 131 | - | 2040 | 59 | - | 371 | 1500 |
| 5 | 8 | 62 | 25.5 | - | 8.3 | - | - | - | - | - | 115 | 128 | 248 | - | 148 | 131 | .0 | 545 | 100 |
| 5 | 15 | 62 | 25.5 | - | 8.4 | - | - | - | - | - | 130 | 97 | 234 | - | 204 | 185 | .0 | 570 | 10 |
| 5 | 22 | 62 | 26.2 | - | 8.4 | - | - | - | - | - | 130 | 106 | 256 | - | 100 | 170 | .0 | 642 | 1000 |
| 5 | 25 | 62 | - | - | - | - | 15 | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 29 | 62 | 27.2 | - | 8.2 | - | - | - | - | - | 145 | 128 | 278 | - | 114 | 171 | .0 | 670 | 2500 |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** TEXAS

**MAJOR BASIN** WESTERN GULF

**MINOR BASIN** RIO GRANDE /LOWER/ BELOW PECOS RIVER

**STATION LOCATION** RIO GRANDE AT
LAREDO, TEXAS 45

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 5 | 62 | 28.0 | - | 8.1 | - | - | - | - | - | 60 | 140 | 220 | - | 353 | 115 | .0 | 473 | 500 |
| 6 | 12 | 62 | 28.0 | - | 8.2 | - | - | - | - | - | 70 | 109 | 174 | - | 764 | 100 | .4 | 417 | 2500 |
| 6 | 19 | 62 | 29.0 | - | 8.3 | - | - | - | - | - | 86 | 140 | 244 | - | 930 | 125 | .0 | - | 600 |
| 6 | 26 | 62 | 28.5 | - | 8.4 | - | - | - | - | - | 66 | 139 | 230 | - | 665 | 155 | .0 | 542 | 530 |
| 7 | 3 | 62 | 28.0 | - | 8.4 | - | - | - | - | - | 56 | 114 | 182 | - | 1540 | 97 | .0 | 415 | 1100 |
| 7 | 10 | 62 | 28.2 | - | 8.4 | - | - | - | - | - | 84 | 129 | 248 | - | 252 | 155 | .0 | 556 | 530 |
| 7 | 17 | 62 | 29.1 | - | 8.3 | - | - | - | - | - | 120 | 121 | 260 | - | 136 | 174 | .0 | 622 | 260 |
| 7 | 24 | 62 | 29.0 | - | 8.4 | - | - | - | - | - | 55 | 126 | 208 | - | 18000 | 145 | .0 | 540 | - |
| 7 | 31 | 62 | 28.0 | - | 8.4 | - | - | - | - | - | 48 | 113 | 218 | - | 14300 | 150 | .1 | 574 | 6000 |
| 8 | 7 | 62 | 29.1 | - | 8.1 | - | - | - | - | - | 78 | 135 | 270 | - | 1310 | 215 | .0 | 640 | 800 |
| 8 | 14 | 62 | 29.9 | - | 8.3 | - | 15 | - | - | - | 68 | 131 | 256 | - | 765 | 188 | .0 | 560 | 1600 |
| 8 | 21 | 62 | 28.6 | - | 8.3 | - | - | - | - | - | 82 | 116 | 210 | - | 302 | 151 | .0 | 527 | 100 |
| 8 | 28 | 62 | 29.0 | - | 8.1 | - | - | - | - | - | 92 | 108 | 216 | - | 148 | 160 | .0 | 543 | 230 |
| 9 | 4 | 62 | 29.0 | - | 8.3 | - | - | - | - | - | 110 | 88 | 206 | - | 176 | 159 | .0 | 610 | 200 |
| 9 | 11 | 62 | 29.2 | - | 8.2 | - | - | - | - | - | 40 | 120 | 184 | - | 30800 | 123 | - | - | - |
| 9 | 18 | 62 | 29.2 | - | 8.3 | - | 72 | - | - | - | 30 | 104 | 228 | - | 9000 | 168 | .0 | 534 | 17000 |
| 9 | 25 | 62 | 27.5 | - | 8.3 | - | - | - | - | - | 46 | 128 | 232 | - | 1460 | 157 | - | - | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Laredo, Texas
Supplied by International Boundary and Water Commission

| | |
|---|---|
| STATE | Texas |
| MAJOR BASIN | Western Gulf |
| MINOR BASIN | Rio Grande/Lower/below |
| STATION LOCATION | Rio Grande at<br>Laredo, Texas |

| Day | October | November | December | January | February | March | April | May | June | July | August | Sept |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.450 | 2.830 | 2.010 | 1.890 | 1.770 | 1.350 | 1.140 | 1.950 | 1.170 | 1.960 | 1.900 | |
| 2 | 2.150 | 2.670 | 2.010 | 1.890 | 1.820 | 1.350 | 1.140 | 1.470 | .992 | 1.780 | 1.840 | |
| 3 | 2.010 | 2.530 | 2.010 | 1.890 | 1.820 | 1.350 | 1.140 | 1.430 | 1.080 | 1.380 | 2.170 | |
| 4 | 2.150 | 2.400 | 1.970 | 1.890 | 1.770 | 1.290 | 1.140 | 1.350 | 1.220 | 1.270 | 2.030 | |
| 5 | 2.380 | 2.460 | 1.970 | 1.850 | 1.660 | 1.230 | 1.140 | 1.220 | 1.130 | 1.160 | 1.840 | |
| 6 | 2.150 | 2.460 | 1.970 | 1.850 | 1.660 | 1.230 | 1.140 | 1.170 | 1.420 | 1.160 | 1.660 | |
| 7 | 2.010 | 2.400 | 1.970 | 1.820 | 1.610 | 1.180 | 1.140 | 1.080 | 1.040 | 1.210 | 1.500 | 3 |
| 8 | 1.930 | 2.270 | 1.970 | 1.820 | 1.610 | 1.230 | 2.630 | 1.040 | .844 | .964 | 1.440 | 5 |
| 9 | 1.850 | 2.270 | 1.970 | 1.850 | 1.610 | 1.230 | 2.050 | .992 | .992 | .844 | 1.380 | 4 |
| 10 | 2.010 | 2.270 | 1.970 | 1.890 | 1.660 | 1.180 | 1.530 | .862 | 1.530 | .964 | 1.270 | 5 |
| 11 | 2.150 | 2.270 | 1.970 | 1.890 | 1.660 | 1.180 | 1.270 | .816 | 2.270 | 1.960 | 1.160 | 7 |
| 12 | 3.530 | 2.270 | 1.970 | 1.890 | 1.660 | 1.180 | 1.140 | .773 | 2.230 | 1.600 | 1.110 | 10 |
| 13 | 3.090 | 2.270 | 2.010 | 1.890 | 1.660 | 1.180 | 1.030 | .731 | 1.910 | 1.320 | 1.110 | 6 |
| 14 | 2.450 | 2.530 | 1.970 | 1.890 | 1.610 | 1.230 | 1.030 | .689 | 1.310 | 1.060 | 1.270 | 4 |
| 15 | 2.450 | 2.210 | 1.970 | 1.890 | 1.490 | 1.230 | 1.030 | .689 | 1.700 | .922 | 1.320 | 3 |
| 16 | 2.150 | 2.270 | 1.970 | 1.930 | 1.490 | 1.230 | .946 | .689 | 1.540 | 1.110 | 2.720 | 2 |
| 17 | 2.010 | 2.210 | 1.970 | 1.890 | 1.490 | 1.230 | .946 | .643 | 1.420 | 1.320 | 1.160 | 2 |
| 18 | 2.010 | 2.160 | 1.970 | 1.890 | 1.440 | 1.330 | .876 | .643 | 2.400 | 1.320 | 1.010 | 2 |
| 19 | 1.930 | 2.160 | 2.010 | 1.850 | 1.440 | 1.490 | .844 | .689 | 3.050 | 1.160 | .964 | 2 |
| 20 | 2.010 | 2.160 | 2.010 | 1.890 | 1.440 | 1.490 | .812 | .731 | 2.230 | 1.160 | .922 | 1 |
| 21 | 2.920 | 2.210 | 1.970 | 1.890 | 1.440 | 1.430 | .812 | .689 | 1.700 | 1.320 | 1.320 | 1 |
| 22 | 2.970 | 2.210 | 1.970 | 1.890 | 1.440 | 1.380 | 1.050 | .731 | 1.370 | 3.130 | 1.010 | 1 |
| 23 | 2.670 | 2.210 | 1.970 | 1.930 | 1.390 | 1.270 | 7.420 | 1.040 | 1.250 | 5.930 | .749 | 1 |
| 24 | 2.600 | 2.210 | 1.930 | 1.930 | 1.390 | 1.200 | 4.130 | .904 | 1.250 | 3.530 | .706 | 1 |
| 25 | 2.520 | 2.110 | 1.890 | 1.890 | 1.390 | 1.200 | 1.840 | 1.260 | 1.170 | 2.570 | .749 | 1 |
| 26 | 2.970 | 2.060 | 1.890 | 1.890 | 1.350 | 1.140 | 1.140 | 1.740 | 1.100 | 2.100 | .837 | 1 |
| 27 | 2.970 | 2.060 | 1.890 | 1.850 | 1.390 | 1.140 | 1.080 | 1.790 | 1.170 | 2.450 | .883 | 2 |
| 28 | 3.030 | 2.060 | 1.890 | 1.820 | 1.350 | 1.080 | 2.400 | 2.400 | 2.070 | 2.030 | .883 | 4 |
| 29 | 3.140 | 2.110 | 1.930 | 1.820 | | 1.080 | 4.800 | 1.350 | 1.620 | 1.780 | .791 | 2 |
| 30 | 3.310 | 2.060 | 1.890 | 1.820 | | 1.140 | 2.830 | .950 | 3.170 | 1.900 | .749 | 2 |
| 31 | 2.970 | | 1.890 | 1.820 | | 1.140 | | .950 | | 2.450 | .706 | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 16 | 61 | 10 | 31 | - | - | - | - | - | - | 0 | 56 | 0 | 64 | 0 | 85 | | | | | | |
| 1 | 8 | 62 | 1 | 17 | 7 | 4 | 11 | 9 | 18 | 10 | 15 | 22 | 32 | 30 | 47 | 37 | | | | | | |
| 1 | 15 | 62 | 1 | 26 | - | - | - | - | - | - | 29 | 21 | 60 | 31 | 89 | 37 | | | | | | |
| 1 | 22 | 62 | 2 | 1 | - | - | - | - | - | - | 73 | 44 | 24 | 52 | 97 | 68 | | | | | | |
| 1 | 29 | 62 | 2 | 13 | 1 | 3 | 6 | 6 | 7 | 7 | 9 | 21 | 54 | 27 | 63 | 34 | | | | | | |
| 2 | 5 | 62 | 2 | 19 | - | - | - | - | - | - | 0 | 26 | 9 | 39 | 9 | 47 | | | | | | |
| 2 | 26 | 62 | 3 | 14 | 0 | 3 | 3 | 10 | 3 | 10 | 9 | 20 | 31 | 31 | 40 | 37 | | | | | | |
| 3 | 5 | 62 | 3 | 20 | - | - | - | - | - | - | 0 | 38 | 14 | 50 | 14 | 63 | | | | | | |
| 3 | 12 | 62 | 3 | 30 | - | - | - | - | - | - | 63 | 38 | 5 | 27 | 68 | 47 | | | | | | |
| 3 | 19 | 62 | 3 | 30 | - | - | - | - | - | - | 52 | 26 | 11 | 20 | 63 | 33 | | | | | | |
| 3 | 26 | 62 | 4 | 11 | 3 | 4 | 4 | 4 | 7 | 6 | 62 | 21 | 26 | 19 | 88 | 28 | | | | | | |
| 4 | 2 | 62 | 4 | 19 | - | - | - | - | - | - | 63 | 19 | 21 | 17 | 84 | 25 | | | | | | |
| 4 | 9 | 62 | 4 | 26 | - | - | - | - | - | - | 37 | 26 | 25 | 27 | 62 | 37 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 16 | 23 | 22 | 22 | 38 | 32 | | | | | | |
| 4 | 23 | 62 | 5 | 29 | 1 | 3 | 0 | 3 | 1 | 4 | 5 | 25 | 0 | 24 | 5 | 34 | | | | | | |
| 4 | 30 | 62 | 4 | 30 | - | - | - | - | - | - | 67 | 29 | 37 | 36 | 104 | 46 | | | | | | |
| 5 | 7 | 62 | 7 | 11 | - | - | - | - | - | - | 14 | 25 | 40 | 29 | 54 | 38 | | | | | | |
| 5 | 14 | 62 | 6 | 22 | - | - | - | - | - | - | 14 | 34 | 36 | 35 | 50 | 49 | | | | | | |
| 5 | 21 | 62 | 7 | 27 | - | - | - | - | - | - | 0 | 10 | 19 | 15 | 19 | 18 | | | | | | |
| 5 | 28 | 62 | 6 | 28 | 2 | 3 | 2 | 3 | 4 | 4 | 110 | 31 | 28 | 28 | 138 | 42 | | | | | | |
| 6 | 4 | 62 | 7 | 6 | - | - | - | - | - | - | 37 | 23 | 32 | 23 | 69 | 33 | | | | | | |
| 6 | 11 | 62 | 7 | 13 | - | - | - | - | - | - | 7 | 14 | 10 | 16 | 17 | 21 | | | | | | |
| 6 | 18 | 62 | 7 | 16 | - | - | - | - | - | - | 15 | 28 | 11 | 29 | 26 | 40 | | | | | | |
| 6 | 25 | 62 | 7 | 25 | 3 | 3 | 3 | 3 | 6 | 4 | 7 | 24 | 27 | 27 | 34 | 36 | | | | | | |
| 7 | 2 | 62 | 8 | 6 | - | - | - | - | - | - | 12 | 19 | 15 | 22 | 27 | 29 | | | | | | |
| 7 | 9 | 62 | 8 | 15 | - | - | - | - | - | - | 25 | 28 | 70 | 29 | 95 | 40 | | | | | | |
| 7 | 16 | 62 | 8 | 3 | - | - | - | - | - | - | 21 | 23 | 34 | 25 | 55 | 34 | | | | | | |
| 7 | 23 | 62 | 8 | 10 | 5 | 5 | 3 | 3 | 8 | 6 | 46 | 31 | 28 | 27 | 74 | 41 | | | | | | |
| 7 | 30 | 62 | 8 | 17 | - | - | - | - | - | - | 304 | 111 | 20 | 15 | 324 | 112 | | | | | | |
| 8 | 6 | 62 | 8 | 29 | - | - | - | - | - | - | 110 | 70 | 17 | 26 | 127 | 75 | | | | | | |
| 8 | 13 | 62 | 8 | 31 | - | - | - | - | - | - | 20 | 36 | 22 | 16 | 42 | 39 | | | | | | |
| 8 | 20 | 62 | 9 | 9 | - | - | - | - | - | - | 15 | 18 | 15 | 19 | 30 | 26 | | | | | | |
| 8 | 27 | 62 | 9 | 13 | 2 | 2 | 3 | 4 | 5 | 4 | 38 | 27 | 36 | 34 | 74 | 43 | | | | | | |
| 9 | 4 | 62 | 10 | 1 | - | - | - | - | - | - | 37 | 24 | 24 | 25 | 61 | 36 | | | | | | |
| 9 | 10 | 62 | 10 | 9 | - | - | - | - | - | - | 85 | 36 | 40 | 31 | 125 | 48 | | | | | | |
| 9 | 17 | 62 | 10 | 13 | - | - | - | - | - | - | 5 | 29 | 35 | 37 | 40 | 47 | | | | | | |
| 9 | 24 | 62 | 10 | 22 | 0 | 2 | 5 | 6 | 5 | 6 | 14 | 12 | 40 | 20 | 54 | 23 | | | | | | |

**STATION LOCATION** RIO GRANDE AT

EL PASO, TEXAS 46

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 16 | 61 | 5100 | 0 | 0 | 540 | 0 | 150 | 0 | 150 | 4310 | 60 | 750 | 87 | 4 | 88 | 3 | 28 | 2 | 78 | 2 | 74 | 1 | | | | | | | | | | |
| 1 | 8 | 62 | 18900 | 110 | 1130 | 50 | 0 | 540 | 20 | 20 | 17060 | 50 | 1350 | 88 | 6 | 78 | 6 | 74 | 4 | 17 | 3 | 91 | 3 | 87 | 3 | 51 | 2 | 80 | 1 | 97 | 1 | | |
| 1 | 22 | 62 | 20500 | 340 | 90 | 1080 | 0 | 790 | 0 | 110 | 18060 | 20 | 500 | 88 | 6 | 78 | 6 | 44 | 3 | 51 | 2 | 91 | 2 | 87 | 2 | 3 | 1 | 57 | 1 | | | | |
| 1 | 29 | 62 | 22800 | 0 | 50 | 50 | 0 | 590 | 0 | 320 | 21800 | 50 | 880 | 78 | 7 | 88 | 6 | 57 | 1 | 51 | 1 | | | | | | | | | | | | |
| 2 | 5 | 62 | 6100 | 0 | 20 | 20 | 0 | 90 | 0 | 20 | 5990 | 0 | 1500 | 78 | 5 | 88 | 4 | 74 | 2 | | | | | | | | | | | | | | |
| 2 | 26 | 62 | 7300 | 80 | 60 | 150 | 0 | 4270 | 0 | 290 | 2460 | 20 | 770 | 51 | 5 | 78 | 4 | 87 | 2 | 68 | 1 | 88 | 1 | 85 | 1 | 74 | 1 | | | | | | |
| 3 | 5 | 62 | 5800 | 80 | 40 | 210 | 20 | 2840 | 20 | 230 | 2340 | 40 | 750 | 51 | 5 | 78 | 3 | 87 | 2 | 88 | 2 | 74 | 2 | 68 | 1 | 85 | 1 | | | | | | |
| 3 | 12 | 62 | 4300 | 20 | 0 | 60 | 0 | 330 | 130 | 500 | 3290 | 100 | 1550 | 78 | 4 | 88 | 2 | 71 | 2 | 87 | 1 | 57 | 1 | 91 | 1 | | | | | | | | |
| 3 | 19 | 62 | 2700 | 0 | 0 | 0 | 0 | 140 | 20 | 480 | 2080 | 110 | 500 | 78 | 4 | 66 | 2 | 91 | 1 | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 2200 | 40 | 0 | 150 | 0 | 330 | 120 | 250 | 1350 | 20 | 390 | 78 | 3 | 51 | 1 | 52 | 1 | 88 | 1 | | | | | | | | | | | | |
| 4 | 16 | 62 | 2800 | 70 | 0 | 340 | 0 | 20 | 0 | 1100 | 1310 | 950 | 1220 | 78 | 3 | 71 | 3 | 25 | 2 | 68 | 1 | 69 | 1 | 88 | 1 | | | | | | | | |
| 5 | 7 | 62 | 8300 | 60 | 20 | 1140 | 20 | 150 | 20 | 1550 | 5340 | 100 | 1280 | 78 | 4 | 92 | 4 | 25 | 2 | 44 | 2 | 79 | 1 | 38 | 1 | 66 | 1 | 91 | 1 | 24 | 1 | 88 | 1 |
| 5 | 21 | 62 | 1600 | 90 | 20 | 220 | 20 | 20 | 0 | 220 | 1050 | 0 | 670 | 78 | 1 | 68 | 1 | 25 | 1 | 92 | 1 | | | | | | | | | | | | |
| 6 | 4 | 62 | 4500 | 100 | 0 | 230 | 40 | 580 | 0 | 810 | 2760 | 40 | 390 | 79 | 3 | 78 | 3 | 57 | 2 | 69 | 2 | 87 | 1 | 88 | 1 | | | | | | | | |
| 6 | 18 | 62 | 3600 | 0 | 0 | 270 | 60 | 850 | 0 | 660 | 1740 | 100 | 190 | 78 | 8 | 57 | 3 | 71 | 2 | 79 | 2 | 69 | 1 | 25 | 1 | | | | | | | | |
| 7 | 2 | 62 | 17400 | 0 | 0 | 1580 | 0 | 60 | 400 | 2410 | 12910 | 590 | 1390 | 78 | 5 | 79 | 5 | 71 | 4 | 88 | 4 | 44 | 4 | 92 | 3 | 97 | 3 | 87 | 3 | 66 | 3 | 74 | 2 |
| 7 | 16 | 62 | 4500 | 0 | 0 | 0 | 0 | 40 | 210 | 2110 | 2110 | 420 | 1060 | 71 | 4 | 78 | 3 | 69 | 2 | 62 | 1 | 79 | 1 | | | | | | | | | | |
| 8 | 6 | 62 | 2200 | 0 | 40 | 60 | 140 | 120 | 0 | 1080 | 750 | 210 | 370 | 71 | 3 | 78 | 1 | 69 | 1 | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 6100 | 0 | 0 | 0 | 0 | 720 | 0 | 1770 | 3630 | 680 | 590 | 71 | 4 | 78 | 4 | 51 | 3 | 92 | 2 | 88 | 2 | 97 | 2 | 79 | 1 | 98 | 1 | | | | |
| 9 | 4 | 62 | 500 | 0 | 0 | 20 | 0 | 10 | 0 | 250 | 220 | 180 | 260 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 1200 | 0 | 10 | 140 | 0 | 0 | 0 | 260 | 790 | 200 | 540 | 87 | 1 | 88 | 1 | | | | | | | | | | | | | | | | |

# PLANKTON POPULATION

**STATE** TEXAS

**MAJOR BASIN** WESTERN GULF

**MINOR BASIN** RIO GRANDE /UPPER/ ABOVE PECOS RIVER

**STATION LOCATION** RIO GRANDE AT

EL PASO, TEXAS 046

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | PROTOZOA (Identifiable) Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 16 | 61 | 65 | 27 | 12 | 9 | 70 | 8 | 66 | 5 | 51 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 8 | 62 | 71 | 32 | 12 | 30 | 4 | 12 | 85 | 4 | 22 | 20 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 3 |
| 1 | 22 | 62 | 71 | 50 | 12 | 41 | 85 | 2 | 71 | 2 | 5 | 90 | 0 | 0 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 1 | 29 | 62 | 12 | 49 | 71 | 39 | 88 | 4 | 11 | 2 | 6 | 360 | 0 | 1 | | | | | | | | | | | 18 | 76 | 2 | 51 | 2 | | | 0 | 1 |
| 2 | 5 | 62 | 12 | 51 | 71 | 30 | 4 | 8 | 10 | 2 | 9 | 0 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 2 | 26 | 62 | 12 | 50 | 65 | 9 | 51 | 6 | 4 | 5 | 30 | 190 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 3 | 5 | 62 | 12 | 32 | 65 | 13 | 4 | 12 | 51 | 8 | 35 | 0 | 0 | 17 | 8 | 2 | | | | | | | | | 3 | | | | | | | 1 | 0 |
| 3 | 12 | 62 | 12 | 55 | 85 | 5 | 65 | 5 | 71 | 4 | 31 | 120 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 12 | 60 | 85 | 7 | 78 | 4 | 92 | 3 | 26 | 20 | 0 | 0 | | | | | | | | | | | 7 | 76 | 1 | | | | | 0 | 0 |
| 4 | 2 | 62 | 12 | 51 | 58 | 9 | 85 | 5 | 71 | 3 | 32 | 0 | 0 | 0 | | | | | | | | | | | 24 | 76 | 3 | 50 | 1 | 51 | 1 | 1 | 0 |
| 4 | 16 | 62 | 12 | 47 | 92 | 9 | 11 | 3 | 10 | 3 | 38 | 50 | 0 | 2 | | | | | | | | | | | 4 | 76 | 1 | | | | | 0 | 0 |
| 5 | 7 | 62 | 12 | 45 | 92 | 24 | 15 | 4 | 11 | 4 | 23 | 80 | 0 | 0 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 12 | 21 | 92 | 12 | 58 | 10 | 15 | 7 | 50 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 58 | 65 | 15 | 9 | 12 | 7 | 41 | 2 | 17 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 12 | 39 | 15 | 18 | 58 | 7 | 80 | 7 | 29 | 40 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 3 |
| 7 | 2 | 62 | 58 | 35 | 12 | 14 | 80 | 9 | 16 | 8 | 34 | 0 | 0 | 7 | 2 | 1 | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 12 | 36 | 80 | 11 | 15 | 7 | 71 | 5 | 41 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 6 | 62 | 80 | 35 | 12 | 15 | 58 | 6 | 10 | 4 | 40 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 20 | 62 | 12 | 22 | 80 | 20 | 58 | 14 | 92 | 6 | 38 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 80 | 40 | 58 | 15 | 82 | 4 | 16 | 3 | 38 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 58 | 22 | 10 | 11 | 80 | 8 | 26 | 7 | 52 | 0 | 0 | 14 | 2 | 2 | | | | | | | | | 0 | | | | | | | 2 | 0 |

***RESULTS IN MICROGRAMS PER LITER***
*(Parts per billion)*

**STATION LOCATION** RIO GRANDE AT
EL PASO, TEXAS

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | |
| 4 | 10 | 62 | 4 | 20 | 5258 | 138 | 37 | 101 | 1 | 10 | 14 | 2 | 1 | 11 | 0 | 4 | 3 | 1 |
| 5 | 15 | 62 | 5 | 23 | 6397 | 91 | 30 | 61 | - | - | - | - | - | - | - | - | - | - |
| 6 | 15 | 62 | 6 | 25 | 4567 | 123 | 36 | 87 | - | - | - | - | - | - | - | - | - | - |
| 6 | 15 | 62 | | * | 10964 | 104 | 32 | 72 | 1 | 10 | 10 | 2 | 1 | 6 | 1 | 3 | 3 | 1 |
| 7 | 19 | 62 | 7 | 29 | 4747 | 105 | 29 | 76 | - | - | - | - | - | - | - | - | - | - |
| 8 | 30 | 62 | 9 | 14 | 5152 | 134 | 32 | 102 | - | - | - | - | - | - | - | - | - | - |
| 8 | 30 | 62 | | * | 9899 | 120 | 31 | 89 | 1 | 7 | 10 | 1 | 1 | 7 | 1 | 4 | 2 | 1 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 11 | 14 | 61 | 18.0 | - | 8.3 | - | - | - | - | - | 72 | 142 | 236 | 5 | 820 | 148 | .1 | 457 | - |
| 11 | 21 | 61 | 17.0 | - | 8.3 | - | - | - | - | - | 90 | 141 | 252 | - | 278 | 187 | .0 | 544 | - |
| 1 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .5 | - | - |
| 1 | 15 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .6 | - | - |
| 1 | 22 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | 1.0 | - | - |
| 1 | 29 | 62 | - | - | - | - | - | - | - | - | - | - | - | 10 | - | - | .3 | - | - |
| 2 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .2 | - | - |
| 2 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | .8 | - | - |
| 3 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | .9 | - | - |
| 3 | 19 | 62 | - | 9.4 | 8.2 | 1.7 | - | 1.4 | 1.7 | - | 120 | 171 | 294 | 5 | 480 | 216 | .4 | 568 | - |
| 3 | 26 | 62 | 17.2 | 7.8 | 8.2 | 4.9 | - | 1.6 | 2.4 | - | 115 | 172 | 260 | 15 | 280 | 228 | .1 | 690 | - |
| 4 | 2 | 62 | 17.8 | 8.9 | 8.2 | 1.6 | - | 1.4 | 1.8 | - | 120 | 178 | 262 | 10 | 260 | 224 | .3 | 724 | - |
| 4 | 9 | 62 | 17.0 | 8.3 | 8.1 | 4.6 | - | 1.4 | 1.7 | - | 135 | 192 | 320 | - | 150 | 231 | - | 731 | - |
| 4 | 16 | 62 | 17.5 | 7.1 | 8.1 | 1.9 | - | 1.7 | 2.0 | - | 150 | 205 | 348 | - | 140 | 242 | .2 | 928 | - |
| 4 | 20 | 62 | - | - | - | - | 12 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 23 | 62 | 23.0 | 8.1 | 8.1 | 2.9 | - | 1.8 | 1.4 | - | 155 | 201 | 344 | 5 | 90 | 237 | .1 | 909 | - |
| 4 | 30 | 62 | 23.0 | 7.9 | 8.1 | 4.1 | - | 1.4 | 1.8 | - | 190 | 215 | 368 | 5 | 65 | 355 | .3 | 1094 | - |
| 5 | 7 | 62 | 25.0 | 8.1 | 8.3 | 4.3 | - | - | 1.6 | - | 170 | 196 | 350 | 5 | 120 | 251 | .2 | 946 | - |
| 5 | 14 | 62 | 23.0 | 8.9 | 8.2 | 3.4 | - | 1.7 | 2.0 | - | 165 | 196 | 334 | 5 | 140 | 239 | .0 | 898 | - |
| 5 | 21 | 62 | 22.0 | 8.8 | 8.2 | 3.2 | - | 1.7 | 1.9 | - | 150 | 194 | 324 | 0 | 145 | 306 | .3 | 943 | - |
| 5 | 28 | 62 | 24.0 | 8.9 | 8.6 | 5.6 | - | 1.7 | 1.8 | - | 145 | 195 | 316 | - | 140 | 226 | - | 860 | - |
| 6 | 5 | 62 | 22.2 | 9.4 | 8.2 | 6.4 | - | 1.6 | 1.9 | - | 135 | 180 | 294 | 5 | 150 | 218 | 1.2 | 697 | - |
| 6 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | .0 | - | - |
| 6 | 25 | 62 | 24.3 | 9.7 | 8.2 | 6.6 | - | 1.4 | 1.6 | - | 135 | 184 | 284 | 5 | 180 | 240 | .1 | - | - |
| 7 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | 160 | - | .0 | - | - |
| 7 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | .0 | - | - |
| 7 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | .1 | - | - |
| 7 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | 10 | - | - | .0 | - | - |
| 7 | 31 | 62 | 25.0 | 11.2 | 8.3 | 8.0 | - | 1.3 | 1.6 | - | 135 | 180 | 278 | - | 5700 | 240 | - | 674 | - |
| 8 | 6 | 62 | 25.0 | 11.4 | 8.2 | .5 | - | 1.5 | 1.7 | - | 145 | 185 | 322 | 5 | 450 | 243 | .0 | 844 | - |
| 8 | 13 | 62 | 25.0 | 6.2 | 8.2 | 3.0 | - | 1.6 | - | - | 140 | 170 | 299 | 5 | 380 | 247 | .0 | 829 | - |
| 8 | 20 | 62 | 26.5 | 7.1 | 8.3 | 4.1 | - | 1.7 | 1.9 | - | 93 | 164 | 240 | 0 | 250 | 225 | .1 | 748 | - |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | .0 | - | - |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | 10 | - | - | .1 | - | - |
| 9 | 10 | 62 | - | - | - | - | - | - | - | - | - | - | - | 0 | - | - | - | - | - |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | - | .2 | - | - |
| 9 | 24 | 62 | - | - | - | - | 16 | - | - | - | - | - | - | - | - | - | - | - | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station below Caballo Dam, New Mexico
Operated by U.S. Bureau of Reclamation

| | |
|---|---|
| STATE | Texas |
| MAJOR BASIN | Western Gulf |
| MINOR BASIN | Rio Grande/Upper/above P |
| STATION LOCATION | Rio Grande at<br>El Paso, Texas |

| Day | October | November | December | January | February | March | April | May | June | July | August | Sept |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .0013 | .0013 | .0011 | .0011 | .0010 | .0013 | 2.390 | .752 | 1.590 | 2.360 | .996 | 2 |
| 2 | .0013 | .0013 | .0011 | .0011 | .0010 | .0013 | 2.220 | .848 | 1.640 | 2.280 | 1.000 | 2 |
| 3 | .0013 | .0013 | .0011 | .0011 | .0010 | .0013 | 2.050 | .844 | 1.660 | 1.990 | 1.160 | 2 |
| 4 | .0013 | .0013 | .0011 | .0012 | .0011 | .0013 | 1.940 | .883 | 1.610 | 1.890 | 1.370 | 2 |
| 5 | .0013 | .0013 | .0011 | .0012 | .0011 | .266 | 1.910 | .943 | 1.530 | 1.850 | 1.380 | 1 |
| 6 | .0013 | .0013 | .0011 | .0011 | .0011 | 1.610 | 1.700 | .936 | 1.500 | 1.700 | 1.470 | |
| 7 | .0013 | .0013 | .0010 | .0011 | .0012 | 1.810 | 1.500 | .913 | 1.490 | 1.580 | 2.010 | |
| 8 | .0013 | .0013 | .0010 | .0011 | .0012 | 1.900 | 1.400 | 1.010 | 1.690 | 1.550 | 2.530 | 1 |
| 9 | .0013 | .0014 | .0010 | .0011 | .0012 | 1.910 | 1.230 | 1.130 | 1.870 | 1.450 | 2.740 | 1 |
| 10 | .0014 | .0014 | .0010 | .0011 | .0012 | 1.920 | 1.150 | 1.150 | 1.860 | 1.540 | 2.910 | |
| 11 | .0014 | .0014 | .0011 | .0011 | .0012 | 1.910 | 1.120 | 1.190 | 1.860 | 1.780 | 2.900 | |
| 12 | .0013 | .0014 | .0011 | .0011 | .0012 | 2.000 | 1.070 | 1.240 | 1.980 | 1.790 | 2.880 | |
| 13 | .0013 | .0014 | .0011 | .0011 | .0012 | 2.150 | .943 | 1.230 | 2.090 | 1.840 | 2.890 | |
| 14 | .0013 | .0014 | .0011 | .0011 | .0012 | 2.080 | .864 | 1.210 | 2.100 | 1.880 | 2.740 | |
| 15 | .0013 | .0014 | .0011 | .0010 | .0012 | 1.990 | .843 | 1.160 | 2.270 | 1.900 | 2.590 | . |
| 16 | .0014 | .0014 | .0011 | .0010 | .0012 | 2.250 | .822 | 1.180 | 2.420 | 1.930 | 2.590 | . |
| 17 | .0014 | .0014 | .0011 | .0011 | .0012 | 2.500 | .918 | 1.200 | 2.400 | 2.050 | 2.440 | . |
| 18 | .0014 | .0014 | .0011 | .0012 | .0013 | 2.500 | 1.050 | 1.130 | 2.320 | 2.090 | 2.290 | . |
| 19 | .0013 | .0014 | .0011 | .0012 | .0013 | 2.500 | 1.050 | 1.080 | 2.260 | 1.900 | 2.270 | . |
| 20 | .0013 | .0013 | .0011 | .0012 | .0013 | 2.610 | 1.070 | 1.080 | 2.170 | 1.870 | 2.260 | . |
| 21 | .0013 | .0012 | .0011 | .0012 | .0013 | 2.750 | 1.060 | 1.090 | 2.140 | 1.980 | 2.100 | . |
| 22 | .0013 | .0011 | .0012 | .0011 | .0013 | 2.750 | .989 | 1.140 | 2.240 | 1.980 | 1.940 | . |
| 23 | .0013 | .0011 | .0012 | .0011 | .0012 | 2.750 | .862 | 1.190 | 2.350 | 1.980 | 1.900 | . |
| 24 | .0013 | .0011 | .0012 | .0011 | .0012 | 2.760 | .793 | 1.180 | 2.340 | 1.980 | 1.990 | . |
| 25 | .0013 | .0011 | .0012 | .0011 | .0012 | 2.760 | .714 | 1.250 | 2.310 | 1.890 | 2.080 | . |
| 26 | .0013 | .0011 | .0012 | .0011 | .0013 | 2.750 | .714 | 1.350 | 2.080 | 1.750 | 2.070 | . |
| 27 | .0013 | .0011 | .0012 | .0011 | .0013 | 2.650 | .704 | 1.360 | 1.980 | 1.710 | 2.060 | . |
| 28 | .0013 | .0012 | .0011 | .0012 | .0013 | 2.470 | .704 | 1.350 | 2.120 | 1.650 | 2.170 | . |
| 29 | .0013 | .0012 | .0011 | .0012 | | 2.350 | .686 | 1.480 | 2.230 | 1.050 | 2.280 | . |
| 30 | .0013 | .0011 | .0011 | .0012 | | 2.390 | .695 | 1.560 | 2.270 | .344 | 2.280 | . |
| 31 | .0013 | | .0011 | .0012 | | 2.420 | | 1.560 | | .986 | 2.360 | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** COLORADO
**MAJOR BASIN** WESTERN GULF
**MINOR BASIN** RIO GRANDE /UPPER/ ABOVE PECOS RIVER
**STATION LOCATION** RIO GRANDE BELOW
ALAMOSA, COLORADO 72

RADIOACTIVITY IN WATER

| DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | |
| MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± |
| 10 | 13 | 0 | 1 | 4 | 2 | 4 | 2 | 4 | 10 | 19 | 17 | 23 | 20 |
| 10 | 31 | 0 | 0 | 1 | 1 | 1 | 1 | 3 | 4 | 11 | 6 | 14 | 7 |
| 11 | 15 | 0 | 1 | 2 | 2 | 2 | 2 | 16 | 4 | 46 | 7 | 62 | 8 |
| 12 | 8 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 6 | 13 | 7 | 15 | 9 |
| 1 | 15 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 4 | 5 | 5 | 7 | 6 |
| 1 | 22 | 0 | 1 | 1 | 1 | 1 | 1 | 4 | 4 | 7 | 5 | 11 | 6 |
| 2 | 2 | 0 | 0 | 2 | 1 | 2 | 1 | 3 | 5 | 8 | 7 | 11 | 9 |
| 2 | 9 | 0 | 1 | 1 | 1 | 1 | 1 | 5 | 4 | 11 | 5 | 16 | 6 |
| 2 | 28 | 0 | 1 | 0 | 1 | 0 | 1 | 19 | 3 | 26 | 4 | 45 | 5 |
| 3 | 5 | 0 | 1 | 1 | 1 | 1 | 1 | 17 | 5 | 27 | 5 | 44 | 7 |
| 3 | 15 | 0 | 1 | 1 | 2 | 1 | 2 | 16 | 4 | 18 | 6 | 34 | 7 |
| 3 | 20 | 0 | 1 | 1 | 1 | 1 | 1 | 8 | 6 | 20 | 7 | 28 | 9 |
| 4 | 2 | 1 | 1 | 2 | 1 | 3 | 1 | 3 | 4 | 13 | 6 | 16 | 7 |
| 4 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 21 | 4 | 33 | 5 | 54 | 6 |
| 4 | 20 | 0 | 1 | 1 | 1 | 1 | 1 | 17 | 5 | 20 | 5 | 37 | 7 |
| 4 | 25 | 0 | 1 | 3 | 2 | 3 | 2 | 28 | 5 | 31 | 6 | 59 | 7 |
| 4 | 30 | 2 | 1 | 1 | 1 | 3 | 1 | 42 | 6 | 28 | 6 | 70 | 8 |
| 6 | 22 | 1 | 1 | 0 | 1 | 1 | 1 | 21 | 6 | 22 | 7 | 43 | 9 |
| 7 | 9 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 6 | 19 | 8 | 25 | 10 |
| 8 | 14 | 0 | 1 | 0 | 3 | 0 | 3 | 62 | 12 | 26 | 15 | 88 | 19 |
| 9 | 5 | 0 | 1 | 4 | 3 | 4 | 3 | 1 | 5 | 11 | 7 | 12 | 8 |
| 9 | 20 | 0 | 1 | 3 | 2 | 3 | 2 | 8 | 9 | 15 | 13 | 23 | 16 |
| 10 | 10 | 0 | 1 | 3 | 2 | 3 | 2 | 34 | 6 | 15 | 8 | 49 | 10 |
| 10 | 15 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 13 | 18 | 7 | 18 | 15 |

RADIOACTIVITY IN PLANKTON

| DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
|---|---|---|---|---|---|
| | | ALPHA | | BETA | |
| MO. | DAY | μμc/g | ± | μμc/g | ± |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** COLORADO

**MAJOR BASIN** WESTERN GULF

**MINOR BASIN** RIO GRANDE /UPPER/ ABOVE PECOS RIVER

**STATION LOCATION** RIO GRANDE BELOW
ALAMOSA, COLORADO 72

| DATE OF SAMPLE | | | TOTAL | ALGAE *(Number per milliliter)* | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 3 | 61 | 1900 | 0 | 0 | 150 | 0 | 190 | 0 | 660 | 890 | 150 | 1120 | 68 | 2 | 84 | 2 | 92 | 1 | 71 | 1 | | | | | | | | | | | | |
| 10 | 16 | 61 | 2300 | 0 | 0 | 130 | 0 | 250 | 0 | 540 | 1340 | 3330 | 470 | 84 | 2 | 68 | 2 | 92 | 1 | 57 | 1 | | | | | | | | | | | | |
| 10 | 30 | 61 | 1600 | 0 | 0 | 0 | 0 | 100 | 0 | 210 | 1260 | 0 | 870 | 84 | 2 | 82 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 11 | 27 | 61 | 1600 | 0 | 0 | 20 | 0 | 150 | 0 | 170 | 1220 | 20 | 460 | 84 | 1 | 92 | 1 | 82 | 1 | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 900 | 20 | 0 | 360 | 0 | 70 | 0 | 20 | 470 | 50 | 860 | 24 | 1 | 84 | 1 | | | | | | | | | | | | | | | | |
| 1 | 22 | 62 | 2100 | 160 | 20 | 810 | 0 | 160 | 0 | 50 | 920 | 20 | 360 | 24 | 2 | 82 | 1 | 28 | 1 | 84 | 1 | | | | | | | | | | | | |
| 2 | 12 | 62 | 1700 | 0 | 0 | 20 | 0 | 440 | 0 | 190 | 1070 | 20 | 150 | 51 | 2 | 82 | 2 | 85 | 1 | 91 | 1 | 92 | 1 | | | | | | | | | | |
| 3 | 5 | 62 | 3300 | 230 | 0 | 60 | 0 | 230 | 60 | 170 | 2570 | 80 | 730 | 84 | 2 | 3 | 1 | 51 | 1 | 82 | 1 | 85 | 1 | | | | | | | | | | |
| 3 | 19 | 62 | 6100 | 130 | 0 | 60 | 0 | 270 | 80 | 310 | 5220 | 210 | 1640 | 92 | 4 | 88 | 3 | 84 | 3 | 91 | 3 | 82 | 2 | 85 | 2 | 87 | 2 | 78 | 1 | 51 | 1 | 68 | 1 |
| 4 | 3 | 62 | 8900 | 80 | 40 | 80 | 0 | 1370 | 40 | 790 | 6540 | 170 | 1410 | 92 | 4 | 51 | 3 | 88 | 3 | 68 | 3 | 82 | 3 | 97 | 2 | 85 | 2 | 91 | 2 | 98 | 1 | 80 | 1 |
| 4 | 16 | 62 | 13000 | 170 | 80 | 210 | 0 | 660 | 120 | 80 | 11720 | 250 | 2570 | 92 | 5 | 82 | 5 | 88 | 3 | 77 | 3 | 85 | 3 | 51 | 2 | 98 | 2 | 79 | 2 | 91 | 1 | 97 | 1 |
| 4 | 30 | 62 | 5900 | 80 | 20 | 510 | 0 | 190 | 530 | 130 | 4470 | 80 | 3740 | 84 | 4 | 92 | 3 | 62 | 2 | 82 | 1 | 88 | 1 | 25 | 1 | 79 | 1 | 91 | 1 | | | | |
| 5 | 15 | 62 | 4500 | 0 | 0 | 120 | 0 | 440 | 0 | 120 | 3850 | 20 | 230 | 92 | 3 | 84 | 3 | 88 | 2 | 57 | 2 | 87 | 1 | 91 | 1 | 97 | 1 | | | | | | |
| 6 | 12 | 62 | 2900 | 0 | 0 | 330 | 0 | 80 | 0 | 370 | 2110 | 100 | 520 | 92 | 3 | 79 | 1 | 38 | 1 | 68 | 1 | 88 | 1 | 84 | 1 | | | | | | | | |
| 7 | 18 | 62 | 6100 | 0 | 0 | 1100 | 0 | 130 | 20 | 2240 | 2660 | 420 | 1820 | 68 | 4 | 88 | 2 | 79 | 2 | 38 | 2 | 85 | 2 | 87 | 2 | 92 | 1 | | | | | | |
| 8 | 14 | 62 | 9900 | 170 | 0 | 1530 | 0 | 1780 | 80 | 3970 | 2360 | 2240 | 1160 | 68 | 5 | 92 | 3 | 57 | 3 | 25 | 3 | 51 | 3 | 84 | 2 | 44 | 1 | 38 | 1 | | | | |
| 9 | 4 | 62 | 4200 | 20 | 0 | 270 | 0 | 180 | 0 | 3510 | 200 | 2770 | 2140 | 68 | 5 | 56 | 1 | 38 | 1 | | | | | | | | | | | | | | |
| 9 | 19 | 62 | 13900 | 170 | 210 | 870 | 0 | 80 | 0 | 6200 | 6410 | 1270 | 5280 | 92 | 4 | 87 | 4 | 88 | 3 | 82 | 2 | 97 | 2 | 38 | 2 | 79 | 1 | 81 | 1 | 17 | 1 | 71 | 1 |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 3 | 61 | 46 | 22 | 92 | 20 | 45 | 9 | 36 | 9 | 40 | 0 | 0 | 16 | 15 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 46 | 25 | 36 | 21 | 92 | 17 | 48 | 7 | 30 | 20 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 30 | 61 | 46 | 30 | 36 | 20 | 92 | 13 | 70 | 4 | 33 | 20 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 27 | 61 | 46 | 22 | 36 | 21 | 92 | 19 | 51 | 4 | 34 | 40 | 0 | 0 | | | | | | | | | | | 8 | 51 | 2 | | | | | 0 | 0 |
| 1 | 2 | 62 | 46 | 24 | 36 | 20 | 92 | 13 | 51 | 7 | 36 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 22 | 62 | 36 | 33 | 46 | 15 | 92 | 13 | 51 | 10 | 29 | 160 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 12 | 62 | 36 | 23 | 51 | 15 | 46 | 8 | 92 | 7 | 47 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 46 | 17 | 36 | 17 | 51 | 10 | 92 | 8 | 48 | 80 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 3 | 19 | 62 | 92 | 19 | 86 | 12 | 48 | 8 | 36 | 8 | 53 | 20 | 0 | 7 | 20 | 1 | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 4 | 3 | 62 | 92 | 22 | 46 | 15 | 36 | 7 | 86 | 4 | 52 | 40 | 0 | 4 | | | | | | | | | | | 1 | | | | | | | 0 | 1 |
| 4 | 16 | 62 | 92 | 33 | 36 | 19 | 48 | 11 | 46 | 6 | 31 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 30 | 62 | 92 | 28 | 46 | 15 | 36 | 8 | 48 | 8 | 41 | 110 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 1 |
| 5 | 15 | 62 | 48 | 36 | 92 | 22 | 71 | 3 | 86 | 3 | 36 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 6 | 12 | 62 | 92 | 27 | 16 | 10 | 48 | 7 | 45 | 6 | 50 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 7 | 18 | 62 | 26 | 19 | 46 | 16 | 48 | 10 | 70 | 9 | 46 | 0 | 0 | 8 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 8 | 14 | 62 | 26 | 40 | 92 | 25 | 46 | 6 | 65 | 2 | 27 | 0 | 0 | 40 | 15 | 3 | 18 | 1 | 22 | 1 | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 26 | 71 | 92 | 4 | 65 | 3 | 46 | 3 | 19 | 0 | 0 | 49 | 6 | 2 | 11 | 1 | 17 | 1 | 15 | 1 | | | 0 | | | | | | | 3 | 0 |
| 9 | 19 | 62 | 26 | 36 | 92 | 14 | 46 | 7 | 70 | 4 | 39 | 0 | 0 | 28 | 4 | 1 | 15 | 1 | | | | | | | 0 | | | | | | | 1 | 0 |

**MINOR BASIN** RIO GRANDE /UPPER/ ABOVE PECOS RIVER

**STATION LOCATION** RIO GRANDE BELOW
ALAMOSA, COLORADO 72

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 3 | 61 | - | - | 7.5 | - | - | - | - | - | 15 | 116 | 168 | 5 | 0 | 117 | .1 | - | - |
| 10 | 30 | 61 | - | - | - | - | - | - | - | - | 11 | 96 | 124 | 5 | 0 | 84 | - | - | 80 |
| 11 | 27 | 61 | - | - | - | - | - | - | - | - | 6 | 88 | 96 | - | - | 49 | - | - | - |
| 1 | 2 | 62 | - | - | - | - | - | - | - | - | 4 | 74 | 80 | 0 | - | 29 | .0 | - | - |
| 1 | 11 | 62 | - | - | - | - | - | - | - | - | 7 | - | 108 | - | - | 29 | - | - | 1700 |
| 1 | 22 | 62 | - | - | - | - | - | - | - | - | 4 | 74 | 176 | - | - | 25 | .0 | - | 2400 |
| 1 | 29 | 62 | - | - | - | - | - | - | - | - | 5 | - | 116 | 10 | - | 30 | .0 | - | 2400 |
| 2 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | 15 | - | 38 | - | - | - |
| 3 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 360 |
| 3 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 190 |
| 4 | 3 | 62 | 8.0 | - | 7.6 | - | - | - | - | - | 11 | 82 | 100 | 10 | - | 40 | .1 | - | - |
| 4 | 9 | 62 | 9.0 | - | 8.2 | - | - | - | - | - | 11 | 96 | 112 | 10 | - | 65 | - | 242 | 110 |
| 4 | 16 | 62 | - | - | - | - | - | - | - | - | 9 | 76 | 88 | 20 | - | 50 | .0 | - | - |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *100 |
| 5 | 15 | 62 | - | - | 7.4 | - | - | - | - | - | 7 | 54 | 96 | 15 | - | 46 | - | - | - |
| 7 | 18 | 62 | - | - | - | - | - | - | - | - | 20 | 152 | - | 10 | 25 | 200 | - | 542 | - |
| 8 | 14 | 62 | - | - | 7.9 | - | - | - | - | - | 13 | 150 | 176 | 5 | *25 | 155 | .1 | 443 | - |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | 13 | 132 | 156 | 0 | 25 | 100 | .0 | - | - |
| 9 | 19 | 62 | - | - | 7.8 | - | - | - | - | - | 9 | 132 | 148 | 5 | *25 | 100 | - | 350 | - |
| 9 | 24 | 62 | - | - | 8.1 | - | - | - | - | - | 4 | 40 | 80 | 10 | 130 | 35 | - | - | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Lobatos, Colorado
Operated by U. S. Geological Survey

STATE Colorado

MAJOR BASIN Western Gulf

MINOR BASIN Rio Grande/Upper/above Pecos River

STATION LOCATION Rio Grande below
Alamosa, Colorado

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .069 | .163 | .384 | .270 | .500 | .479 | .390 | 1.680 | .531 | .280 | .150 | .082 |
| 2 | .071 | .251 | .406 | .270 | .500 | .525 | .496 | 1.380 | .554 | .289 | .144 | .076 |
| 3 | .073 | .681 | .423 | .270 | .500 | .612 | .513 | 1.240 | .586 | .298 | .131 | .073 |
| 4 | .069 | .854 | .418 | .270 | .500 | .519 | .537 | 1.280 | .632 | .289 | .120 | .069 |
| 5 | .062 | .883 | .401 | .270 | .500 | .479 | .508 | 1.340 | .753 | .322 | .108 | .069 |
| 6 | .062 | .717 | .384 | .270 | .500 | .446 | .462 | 1.490 | 1.010 | .353 | .114 | .062 |
| 7 | .065 | .542 | .384 | .270 | .500 | .502 | .462 | 1.620 | 1.190 | .374 | .108 | .069 |
| 8 | .062 | .502 | .289 | .270 | .500 | .468 | .446 | 1.820 | 1.050 | .468 | .100 | .067 |
| 9 | .071 | .468 | .210 | .270 | .500 | .434 | .479 | 1.970 | .892 | .451 | .092 | .085 |
| 10 | .076 | .474 | .160 | .270 | .500 | .418 | .502 | 2.150 | .802 | .446 | .082 | .085 |
| 11 | .071 | .537 | .110 | .270 | .500 | .412 | .508 | 2.290 | .854 | .401 | .076 | .078 |
| 12 | .073 | .531 | .115 | .270 | .500 | .342 | .485 | 2.130 | .951 | .368 | .076 | .078 |
| 13 | .111 | .450 | .210 | .270 | .500 | .303 | .474 | 1.950 | .836 | .342 | .069 | .073 |
| 14 | .108 | .505 | .230 | .270 | .500 | .272 | .490 | 1.790 | .864 | .332 | .053 | .071 |
| 15 | .111 | .468 | .260 | .270 | .500 | .332 | .632 | 1.770 | .951 | .294 | .049 | .062 |
| 16 | .114 | .485 | .265 | .270 | .500 | .379 | .811 | 1.340 | 1.060 | .259 | .047 | .062 |
| 17 | .102 | .479 | .270 | .270 | .639 | .457 | 1.080 | 1.040 | 1.120 | .231 | .044 | .058 |
| 18 | .092 | .470 | .270 | .270 | .605 | .395 | 1.570 | 1.030 | .962 | .199 | .044 | .056 |
| 19 | .090 | .455 | .270 | .270 | .573 | .379 | 1.930 | .802 | .777 | .181 | .039 | .056 |
| 20 | .088 | .445 | .270 | .270 | .560 | .368 | 2.250 | .653 | .612 | .117 | .044 | .062 |
| 21 | .085 | .395 | .275 | .270 | .592 | .358 | 2.480 | .625 | .508 | .065 | .053 | .069 |
| 22 | .085 | .375 | .275 | .270 | .525 | .348 | 2.510 | .681 | .479 | .051 | .065 | .065 |
| 23 | .080 | .370 | .270 | .270 | .485 | .342 | 2.340 | .580 | .485 | .051 | .054 | .065 |
| 24 | .069 | .355 | .265 | .270 | .496 | .322 | 1.870 | .537 | .412 | .067 | .053 | .067 |
| 25 | .073 | .342 | .265 | .270 | .485 | .289 | 1.620 | .519 | .353 | .085 | .125 | .073 |
| 26 | .102 | .348 | .265 | .270 | .490 | .272 | 1.730 | .474 | .368 | .085 | .090 | .065 |
| 27 | .105 | .379 | .265 | .270 | .423 | .259 | 1.770 | .479 | .418 | .098 | .085 | .056 |
| 28 | .095 | .390 | .265 | .270 | .418 | .272 | 1.640 | .605 | .358 | .114 | .078 | .054 |
| 29 | .098 | .390 | .265 | .270 |  | .308 | 1.640 | .674 | .322 | .276 | .080 | .054 |
| 30 | .111 | .390 | .265 | .270 |  | .353 | 1.750 | .605 | .327 | .177 | .080 | .054 |
| 31 | .131 |  | .265 | .270 |  | .384 |  | .513 |  | .160 | .088 |  |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** SOUTHEAST

**MINOR BASIN** ROANOKE RIVER

**STATION LOCATION** ROANOKE RIVER AT
JOHN H KERR RESR & DAM, VIR

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTO | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIV | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | | ALPHA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | | | MO. | DAY | μμc/g | ± |
| 10 | 2 | 61 | 10 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 9 | 4 | 10 | 6 | | | | | | |
| 10 | 9 | 61 | 10 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 4 | 1 | 4 | 8 | 6 | | | | | | |
| 10 | 16 | 61 | 10 | 31 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 4 | 4 | 4 | 4 | 6 | | | | | | |
| 10 | 23 | 61 | 11 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 4 | 7 | 4 | 9 | 6 | | | | | | |
| 10 | 30 | 61 | 11 | 7 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 5 | 7 | 5 | 13 | 7 | | | | | | |
| 11 | 6 | 61 | 11 | 16 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 4 | 8 | 4 | 9 | 6 | | | | | | |
| 11 | 13 | 61 | 11 | 24 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 5 | 4 | 5 | 4 | 7 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 7 | 4 | 7 | 6 | | | | | | |
| 11 | 27 | 61 | 12 | 6 | 0 | 0 | 0 | 1 | 0 | 1 | 5 | 4 | 7 | 4 | 12 | 6 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 6 | 9 | 6 | 17 | 8 | | | | | | |
| 12 | 11 | 61 | 12 | 26 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 4 | 10 | 4 | 11 | 6 | | | | | | |
| 12 | 18 | 61 | 12 | 28 | 0 | 1 | 0 | 1 | 0 | 1 | 11 | 4 | 13 | 4 | 24 | 6 | | | | | | |
| 12 | 26 | 61 | 1 | 4 | 0 | 1 | 0 | 1 | 0 | 1 | 21 | 4 | 13 | 4 | 34 | 6 | | | | | | |
| 1 | 2 | 62 | 1 | 12 | 0 | 1 | 0 | 0 | 0 | 1 | 16 | 4 | 120 | 4 | 46 | 6 | | | | | | |
| 1 | 8 | 62 | 1 | 18 | 1 | 1 | 0 | 1 | 1 | 1 | 23 | 5 | 15 | 5 | 38 | 7 | | | | | | |
| 1 | 15 | 62 | 1 | 26 | 1 | 1 | 0 | 1 | 1 | 1 | 74 | 6 | 27 | 5 | 101 | 8 | | | | | | |
| 1 | 22 | 62 | 2 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 33 | 5 | 17 | 4 | 50 | 7 | | | | | | |
| 1 | 29 | 62 | 2 | 12 | 1 | 1 | 0 | 1 | 1 | 1 | 41 | 6 | 18 | 5 | 59 | 9 | | | | | | |
| 2 | 5 | 62 | 2 | 13 | 1 | 1 | 1 | 1 | 2 | 1 | 23 | 5 | 26 | 5 | 49 | 7 | | | | | | |
| 2 | 12 | 62 | 2 | 21 | 1 | 1 | 0 | 1 | 1 | 1 | 51 | 6 | 22 | 5 | 73 | 8 | | | | | | |
| 2 | 19 | 62 | 3 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 38 | 5 | 22 | 5 | 60 | 7 | | | | | | |
| 2 | 26 | 62 | 3 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 28 | 5 | 12 | 4 | 40 | 6 | | | | | | |
| 3 | 5 | 62 | 3 | 16 | 1 | 1 | 0 | 1 | 1 | 1 | 43 | 6 | 22 | 5 | 65 | 7 | | | | | | |
| 3 | 12 | 62 | 3 | 22 | 0 | 1 | 0 | 1 | 0 | 1 | 69 | 7 | 37 | 5 | 106 | 9 | | | | | | |
| 3 | 19 | 62 | 3 | 28 | 0 | 1 | 0 | 1 | 0 | 1 | 33 | 5 | 19 | 5 | 52 | 7 | | | | | | |
| 3 | 26 | 62 | 4 | 3 | 1 | 1 | 0 | 0 | 1 | 1 | 46 | 6 | 19 | 4 | 65 | 7 | | | | | | |
| 4 | 2 | 62 | 4 | 16 | 1 | 1 | 0 | 0 | 1 | 1 | 39 | 5 | 26 | 5 | 65 | 7 | | | | | | |
| 4 | 9 | 62 | 4 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 5 | 15 | 4 | 52 | 6 | | | | | | |
| 4 | 16 | 62 | 4 | 27 | 0 | 1 | 0 | 1 | 0 | 1 | 32 | 5 | 21 | 5 | 53 | 7 | | | | | | |
| 4 | 23 | 62 | 5 | 25 | 0 | 1 | 0 | 1 | 0 | 1 | 25 | 7 | 24 | 7 | 49 | 10 | | | | | | |
| 4 | 30 | 62 | 5 | 25 | 0 | 1 | 0 | 1 | 0 | 1 | 17 | 6 | 19 | 6 | 36 | 8 | | | | | | |
| 5 | 7 | 62 | 6 | 12 | 1 | 1 | 0 | 1 | 1 | 1 | 12 | 7 | 23 | 8 | 35 | 11 | | | | | | |
| 5 | 14 | 62 | 6 | 25 | 0 | 0 | 0 | 1 | 0 | 1 | 16 | 5 | 14 | 5 | 30 | 7 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 6 | 11 | 6 | 29 | 8 | | | | | | |
| 5 | 28 | 62 | 6 | 28 | 0 | 1 | 0 | 1 | 0 | 1 | 11 | 5 | 12 | 6 | 23 | 8 | | | | | | |
| 6 | 4 | 62 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 5 | 14 | 6 | 22 | 8 | | | | | | |
| 6 | 11 | 62 | 7 | 9 | 0 | 1 | 0 | 1 | 0 | 1 | 10 | 5 | 18 | 7 | 28 | 9 | | | | | | |
| 6 | 18 | 62 | 7 | 20 | 0 | 1 | 0 | 1 | 0 | 1 | 9 | 5 | 10 | 5 | 19 | 7 | | | | | | |
| 7 | 16 | 62 | 8 | 2 | 1 | 1 | 0 | 1 | 1 | 1 | 13 | 7 | 9 | 5 | 22 | 9 | | | | | | |
| 7 | 23 | 62 | 8 | 15 | 0 | 1 | 1 | 1 | 1 | 1 | 8 | 7 | 14 | 6 | 22 | 9 | | | | | | |
| 7 | 30 | 62 | 8 | 17 | 1 | 1 | 0 | 1 | 1 | 1 | 12 | 6 | 18 | 6 | 30 | 8 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | | | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 6 | 62 | 8 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 7 | 6 | 6 | 13 | 9 | | | | | | | | |
| 8 | 13 | 62 | 9 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 12 | 14 | 9 | 6 | 21 | 15 | | | | | | | | |
| 8 | 20 | 62 | 10 | 8 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 11 | 12 | 6 | 14 | 12 | | | | | | | | |
| 8 | 27 | 62 | 9 | 14 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 7 | 2 | 8 | 2 | 11 | | | | | | | | |
| 9 | 4 | 62 | 9 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 5 | 6 | 5 | 10 | 7 | | | | | | | | |
| 9 | 17 | 62 | 10 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 5 | 15 | 6 | 16 | 7 | | | | | | | | |
| 9 | 24 | 62 | 10 | 18 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 6 | 11 | 6 | 15 | 8 | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** VIRGINIA
**MAJOR BASIN** SOUTHEAST
**MINOR BASIN** ROANOKE RIVER
**STATION LOCATION** ROANOKE RIVER AT
JOHN H KERR RESR & DAM, VIRGINIA

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 1 |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS |
| 10 | 2 | 61 | 200 | 0 | 0 | 0 | 0 | 20 | 0 | 170 | 0 | 40 | 0 | | | | | | | | | | | | | | | | | | | |
| 10 | 2 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 40 | 40 | 0 | 20 | 0 | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 200 | 0 | 0 | 40 | 0 | 0 | 0 | 120 | 60 | 0 | 20 | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 100 | 0 | 20 | 0 | 0 | 0 | 0 | 120 | 0 | 0 | 20 | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 100 | 20 | 0 | 0 | 0 | 20 | 0 | 90 | 0 | 20 | 0 | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 100 | 0 | 0 | 20 | 0 | 20 | 0 | 40 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 500 | 0 | 0 | 20 | 0 | 40 | 0 | 390 | 40 | 100 | 20 | 69 | 1 | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 200 | 0 | 0 | 0 | 0 | 20 | 0 | 210 | 20 | 40 | 0 | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 300 | 0 | 0 | 0 | 0 | 40 | 0 | 200 | 20 | 20 | 0 | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 200 | 0 | 20 | 0 | 0 | 50 | 20 | 50 | 20 | 50 | 50 | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 200 | 0 | 0 | 0 | 0 | 50 | 0 | 110 | 50 | 70 | 50 | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 600 | 0 | 0 | 0 | 0 | 50 | 450 | 90 | 50 | 20 | 20 | 62 | 2 | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 600 | 0 | 0 | 0 | 0 | 0 | 340 | 50 | 180 | 0 | 50 | 62 | 2 | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 400 | 0 | 0 | 0 | 0 | 160 | 130 | 20 | 70 | 90 | 20 | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 900 | 0 | 0 | 0 | 0 | 150 | 460 | 230 | 20 | 20 | 40 | 62 | 2 | 69 | 1 | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 300 | 0 | 0 | 0 | 0 | 90 | 20 | 180 | 20 | 130 | 90 | 69 | 1 | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 600 | 0 | 0 | 0 | 0 | 190 | 20 | 330 | 20 | 20 | 0 | 69 | 1 | 57 | 1 | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 700 | 0 | 0 | 0 | 0 | 0 | 0 | 460 | 210 | 0 | 0 | 69 | 1 | | | | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 500 | 0 | 20 | 0 | 0 | 0 | 0 | 430 | 50 | 70 | 0 | 69 | 2 | | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 300 | 0 | 0 | 20 | 0 | 0 | 0 | 190 | 100 | 0 | 40 | 69 | 1 | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 300 | 0 | 0 | 20 | 0 | 0 | 0 | 230 | 40 | 20 | 0 | | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 300 | 0 | 0 | 0 | 40 | 60 | 0 | 120 | 60 | 60 | 0 | | | | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 300 | 80 | 0 | 130 | 0 | 40 | 0 | 40 | 40 | 40 | 80 | | | | | | | | | | | | | | | | | | | |
| 9 | 19 | 62 | 200 | 0 | 70 | 70 | 0 | 10 | 10 | 30 | 0 | 20 | 10 | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 58 | 44 | 56 | 25 | 57 | 18 | 28 | 6 | 7 | 0 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 10 | 2 | 61 | 58 | 63 | 56 | 12 | 57 | 9 | 47 | 5 | 11 | 1300 | 0 | 5 | | | | | | | | | | | 6 | 50 | 1 | | | | | 0 | 0 |
| 10 | 16 | 61 | 58 | 76 | 56 | 10 | 57 | 8 | 28 | 3 | 3 | 640 | 0 | — | | | | | | | | | | | — | | | | | | | — | — |
| 10 | 16 | 61 | 58 | 84 | 57 | 6 | 56 | 6 | 28 | 3 | 1 | 100 | 0 | 94 | 17 | 4 | 22 | 2 | 10 | 1 | 46 | 1 | | | 7 | 76 | 1 | | | | | 0 | 0 |
| 11 | 6 | 61 | 58 | 57 | 57 | 19 | 47 | 6 | 56 | 5 | 13 | 100 | 0 | 168 | 17 | 5 | 11 | 2 | 22 | 1 | 21 | 1 | | | 2 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 58 | 56 | 56 | 23 | 57 | 16 | 28 | 2 | 3 | 310 | 0 | 3 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 58 | 74 | 56 | 10 | 57 | 9 | 28 | 3 | 4 | 0 | 0 | 5 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 58 | 68 | 57 | 13 | 56 | 11 | 47 | 3 | 5 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 58 | 59 | 56 | 20 | 57 | 13 | 82 | 3 | 5 | 40 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 58 | 36 | 57 | 18 | 56 | 16 | 82 | 14 | 16 | 0 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 27 | 23 | 56 | 23 | 57 | 16 | 58 | 12 | 26 | 0 | 10 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 56 | 72 | 57 | 8 | 58 | 6 | 82 | 3 | 11 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 56 | 61 | 58 | 16 | 57 | 11 | 28 | 2 | 10 | 0 | 10 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 56 | 57 | 58 | 9 | 27 | 8 | 82 | 5 | 21 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 56 | 22 | 57 | 17 | 27 | 15 | 9 | 14 | 32 | 0 | 10 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 56 | 66 | 57 | 9 | 58 | 8 | 27 | 4 | 13 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 56 | 76 | 57 | 9 | 58 | 5 | 9 | 3 | 7 | 0 | 20 | 5 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 57 | 34 | 82 | 15 | 56 | 13 | 58 | 8 | 30 | 0 | 0 | 14 | 17 | 1 | 11 | 1 | | | | | | | 3 | 50 | 1 | | | | | 0 | 0 |
| 5 | 7 | 62 | 56 | 84 | 57 | 10 | 58 | 2 | 28 | 1 | 3 | 1860 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 56 | 88 | 57 | 5 | 28 | 3 | 82 | 2 | 2 | 0 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 56 | 41 | 58 | 24 | 57 | 13 | 28 | 10 | 12 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 58 | 49 | 47 | 25 | 56 | 19 | 57 | 4 | 3 | 0 | 10 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 1 |
| 7 | 2 | 62 | 58 | 50 | 56 | 17 | 47 | 15 | 57 | 12 | 6 | 0 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 58 | 64 | 56 | 15 | 57 | 9 | 47 | 5 | 7 | 0 | 0 | 8 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 56 | 38 | 58 | 33 | 57 | 11 | 28 | 8 | 10 | 0 | 0 | 6 | | | | | | | | | | | 0 | | | | | | | 0 | 9 |
| 8 | 20 | 62 | 58 | 25 | 56 | 22 | 57 | 20 | 28 | 14 | 19 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 58 | 37 | 56 | 28 | 28 | 16 | 57 | 14 | 5 | 0 | 0 | 0 | | | | | | | | | | | 6 | | | | | | | 0 | 70 |
| 9 | 19 | 62 | 58 | 44 | 57 | 15 | 56 | 13 | 28 | 6 | 22 | 0 | 0 | 146 | 11 | 4 | 17 | 3 | 22 | 3 | 21 | 3 | 5 | 1 | 59 | 50 | 4 | 76 | 4 | 53 | 2 | 0 | 0 |

RESULTS IN MICROGRAMS PER LITER
(Parts per billion)

**STATION LOCATION** ROANOKE RIVER AT

JOHN H KERR RESR & DAM, VIRGIN

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES |
| 10 | 2 | 61 | 10 | 19 | 4940 | 305 | 81 | 224 | 2 | 19 | 20 | 3 | 1 | 14 | 2 | 10 | 8 | 2 |
| 11 | 6 | 61 | 11 | 22 | 4760 | 284 | 104 | 180 | 9 | 28 | 18 | 1 | 1 | 14 | 2 | 8 | 14 | 1 |
| 12 | 4 | 61 | 12 | 19 | 4570 | 301 | 91 | 210 | 7 | 23 | 20 | 1 | 1 | 17 | 1 | 9 | 9 | 2 |
| 1 | 2 | 62 | 1 | 24 | 4850 | 278 | 98 | 180 | 7 | 29 | 19 | 1 | 1 | 15 | 2 | 8 | 10 | 2 |
| 2 | 5 | 62 | 2 | 21 | 4790 | 306 | 105 | 201 | 19 | 28 | 20 | 1 | 1 | 18 | 0 | 7 | 8 | 1 |
| 3 | 5 | 62 | 3 | 21 | 4940 | 293 | 109 | 184 | 8 | 27 | 25 | 2 | 1 | 21 | 1 | 12 | 10 | 1 |
| 4 | 2 | 62 | 4 | 18 | 4800 | 276 | 130 | 146 | 8 | 34 | 26 | 2 | 1 | 22 | 1 | 17 | 12 | 1 |
| 5 | 7 | 62 | 5 | 23 | 4850 | 236 | 141 | 95 | 21 | 40 | 18 | 1 | 1 | 15 | 1 | 9 | 20 | 1 |
| 6 | 4 | 62 | 6 | 19 | 4580 | 272 | 123 | 149 | 8 | 33 | 17 | 1 | 1 | 15 | 0 | 11 | 15 | 1 |
| 7 | 2 | 62 | 7 | 19 | 4970 | 228 | 117 | 111 | 6 | 29 | 21 | 1 | 1 | 18 | 1 | 13 | 15 | 1 |
| 8 | 6 | 62 | 8 | 22 | 4930 | 268 | 91 | 177 | 5 | 24 | 18 | 1 | 1 | 15 | 1 | 10 | 11 | 1 |
| 9 | 4 | 62 | 9 | 21 | 5000 | 224 | 95 | 129 | 6 | 23 | 17 | 1 | 1 | 15 | 0 | 11 | 12 | 1 |

STATION LOCATION ROANOKE RIVER AT

JOHN H KERR RESR & DAM, VIRGINIA 91

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 19 | 61 | - | - | - | - | 9 | - | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 13 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 9 | .1 | - | - |
| 11 | 20 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 6 | .1 | - | - |
| 11 | 22 | 61 | - | - | - | - | 13 | - | - | - | - | - | - | - | - | 8 | .0 | - | - |
| 11 | 27 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 | .0 | - | - |
| 12 | 11 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 7 | .0 | - | - |
| 12 | 18 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 11 | .1 | - | - |
| 12 | 19 | 61 | - | - | - | - | 13 | - | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 26 | 61 | - | - | - | - | - | - | - | - | - | 36 | - | - | - | 15 | .1 | - | - |
| 1 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | 75 | 10 | .3 | - | - |
| 1 | 15 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 9 | - | - | - |
| 1 | 24 | 62 | - | - | - | - | 18 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 29 | 62 | - | - | - | - | - | - | - | - | - | - | 52 | - | - | 18 | - | - | - |
| 2 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 19 | .0 | - | - |
| 2 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 14 | - | - | - |
| 2 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 20 | - | - | - |
| 2 | 21 | 62 | - | - | - | - | 14 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 21 | 62 | - | - | - | - | 10 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 26 | 62 | - | - | - | - | - | - | - | - | - | 24 | - | - | 0 | 13 | .0 | - | - |
| 4 | 2 | 62 | - | - | - | - | - | - | - | - | - | 28 | - | - | - | 5 | - | 36 | - |
| 4 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 11 | .0 | 81 | - |
| 4 | 18 | 62 | - | - | - | - | 19 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 23 | 62 | - | - | - | - | - | - | - | - | - | 32 | - | - | - | 7 | .0 | - | - |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | - | 32 | - | - | - | 12 | .0 | - | - |
| 5 | 14 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 13 | - | - | - |
| 5 | 21 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 | .0 | - | - |
| 5 | 23 | 62 | - | - | - | - | 8 | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 28 | 62 | - | - | - | - | - | - | - | - | 5 | - | - | - | - | 10 | .0 | - | - |
| 6 | 4 | 62 | - | - | - | - | - | - | - | - | - | 28 | - | - | - | 10 | .0 | - | - |
| 6 | 11 | 62 | - | - | - | - | - | - | - | - | - | 28 | - | - | - | 10 | .0 | - | - |
| 7 | 19 | 62 | - | - | - | - | 21 | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 23 | 62 | - | - | - | - | - | - | - | - | - | 28 | - | - | 25 | 7 | .0 | 67 | - |
| 8 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | *25 | 6 | - | 67 | - |
| 8 | 20 | 62 | - | - | - | - | - | - | - | - | - | 32 | - | - | *25 | 4 | - | 72 | - |
| 8 | 23 | 62 | - | - | - | - | 20 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | - | 34 | - | - | *25 | 73 | - | 76 | - |
| 9 | 21 | 62 | - | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | - |

PROVISIONAL--SUBJECT TO REVISION

MINOR BASIN Roanoke River

Gaging Station at Buggs Island, Virginia
Operated by U.S. Geological Survey

STATION LOCATION Roanoke River at
John H. Kerr Reservoir & Dam, Va.

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .210 | 4.400 | 5.740 | 9.900 | 16.000 | 17.000 | .304 | 6.690 | 6.420 | 1.500 | 6.240 | .240 |
| 2 | 5.360 | 4.800 | 1.780 | 13.500 | 14.100 | 16.500 | 11.600 | 6.720 | 4.620 | 18.700 | 5.960 | .235 |
| 3 | 4.890 | 4.600 | .720 | 16.100 | 4.880 | 5.820 | 18.000 | 5.840 | 2.130 | 17.500 | 4.020 | .240 |
| 4 | 3.310 | 2.800 | 7.590 | 15.200 | 4.260 | 2.400 | 17.600 | 6.830 | 7.580 | 4.230 | .505 | 7.840 |
| 5 | 5.320 | .730 | 7.100 | 15.500 | 14.700 | 17.200 | 16.900 | 3.140 | 6.700 | 18.400 | .250 | 7.560 |
| 6 | 4.100 | 5.800 | 5.680 | 8.900 | 15.800 | 14.300 | 14.900 | 2.660 | 7.170 | 15.600 | 8.140 | 3.700 |
| 7 | .997 | 4.200 | 7.500 | 2.490 | 18.000 | 17.000 | .292 | 10.600 | 7.000 | .332 | 6.120 | 3.150 |
| 8 | .200 | 4.700 | 6.620 | 11.800 | 18.500 | 18.200 | 1.150 | 8.080 | 7.420 | .310 | 8.100 | .245 |
| 9 | 6.600 | 5.400 | 3.240 | 13.700 | 16.700 | 18.400 | 18.700 | 8.760 | 4.560 | 6.420 | 3.400 | .240 |
| 10 | 4.700 | 3.200 | 2.050 | 15.000 | 6.020 | 6.780 | 17.500 | 9.740 | 2.080 | 4.960 | 3.660 | 9.990 |
| 11 | 4.700 | 1.000 | 6.340 | 15.000 | 1.200 | .825 | 19.400 | 9.820 | 9.740 | 6.380 | .240 | 7.080 |
| 12 | 4.000 | .200 | 8.440 | 18.100 | 18.900 | 14.500 | 9.720 | 8.520 | 8.310 | 6.680 | .405 | 4.500 |
| 13 | 3.100 | 5.100 | 8.280 | 17.800 | 14.100 | 15.900 | 19.600 | 3.230 | 8.040 | 6.010 | 7.680 | 9.270 |
| 14 | .680 | 3.800 | 7.960 | 15.300 | 12.300 | 17.800 | 20.400 | 9.530 | 16.300 | .930 | 8.700 | 7.300 |
| 15 | .200 | 3.200 | 8.060 | 17.500 | 13.000 | 18.400 | 15.400 | 9.860 | 18.400 | .310 | 8.510 | .225 |
| 16 | 4.000 | 3.990 | 3.890 | 16.000 | 14.500 | 17.500 | 19.800 | 8.200 | 16.800 | 5.940 | 10.000 | .225 |
| 17 | 2.800 | 4.020 | 2.200 | 17.400 | 2.800 | 19.500 | 18.000 | 6.800 | 17.000 | 3.380 | 7.800 | 4.480 |
| 18 | 3.800 | 2.780 | 9.020 | 18.000 | .310 | 16.400 | 20.500 | 10.300 | 20.300 | 5.240 | .590 | 2.330 |
| 19 | 3.500 | .250 | 14.300 | 17.000 | 5.610 | 20.200 | 18.200 | 7.460 | 18.500 | 5.790 | .240 | 2.410 |
| 20 | 4.800 | 5.800 | 17.200 | 7.130 | 11.900 | 18.600 | 18.800 | 4.430 | 18.400 | 6.270 | 9.640 | 2.480 |
| 21 | 2.500 | 5.610 | 13.700 | 5.000 | 11.600 | 13.000 | 6.640 | 10.200 | 19.800 | 2.220 | 8.950 | 2.340 |
| 22 | .200 | 4.790 | 13.700 | 13.600 | 12.400 | 18.000 | 1.080 | 6.280 | 18.900 | .298 | 4.340 | .245 |
| 23 | 7.400 | 2.810 | 8.080 | 12.900 | 14.400 | 18.200 | 15.900 | 6.300 | 1.280 | 6.980 | 3.370 | .235 |
| 24 | 6.400 | 4.740 | 8.080 | 14.900 | 9.480 | 11.300 | 19.400 | 7.690 | .378 | 5.020 | 6.080 | 4.100 |
| 25 | 8.200 | 2.020 | 7.960 | 12.600 | 9.560 | 6.010 | 15.600 | 6.530 | 9.390 | 3.700 | 1.340 | 4.960 |
| 26 | 6.800 | .790 | 14.100 | 17.200 | 18.200 | 18.400 | 17.300 | 3.500 | 13.000 | 4.820 | .975 | 5.170 |
| 27 | 6.700 | 8.120 | 13.600 | 10.700 | 17.100 | 17.600 | 15.800 | 2.840 | 15.500 | 3.220 | 9.420 | 7.060 |
| 28 | 3.900 | 7.610 | 15.600 | 6.000 | 16.100 | 18.200 | 4.530 | 5.580 | 12.100 | .268 | 5.080 | 7.470 |
| 29 | .570 | 6.780 | 14.800 | 19.000 |  | 15.500 | 2.020 | 8.750 | 14.900 | .298 | 5.110 | .225 |
| 30 | 5.900 | 6.760 | 10.300 | 16.900 |  | 11.700 | 7.240 | 2.640 | 8.060 | 5.590 | 6.680 | .215 |
| 31 | 4.000 |  | 4.340 | 16.500 |  | .292 |  | 7.060 |  | 13.700 | 7.720 |  |

STATION LOCATION SABINE RIVER NEAR

RULIFF, TEXAS

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 19 | 61 | 11 | 13 | 5000 | 230 | 99 | 131 | 2 | 22 | 25 | 2 | 1 | 21 | 1 | 12 | 13 | 2 | 23 |
| 12 | 1 | 61 | 12 | 24 | 5000 | 363 | 154 | 209 | 5 | 37 | 26 | 2 | 1 | 22 | 1 | 17 | 22 | 3 | 44 |
| 1 | 27 | 62 | 2 | 13 | 5000 | 280 | 106 | 174 | 7 | 27 | 17 | 3 | 2 | 12 | 0 | 10 | 14 | 1 | 30 |
| 3 | 1 | 62 | 3 | 17 | 5000 | 261 | 53 | 208 | 1 | 10 | 16 | 2 | 1 | 12 | 1 | 8 | 6 | 1 | 11 |
| 4 | 7 | 62 | 5 | 11 | 5000 | 230 | 95 | 135 | 2 | 25 | 21 | 0 | 2 | 19 | 0 | 15 | 12 | 1 | 19 |
| 7 | 17 | 62 | 7 | 23 | 3910 | 224 | 108 | 116 | 1 | 25 | 28 | 4 | 1 | 21 | 2 | 13 | 13 | 1 | 27 |
| 8 | 1 | 62 | 8 | 3 | 300 | * | - | - | - | - | - | - | - | - | - | - | - | - | - |

* LOW FLOW - NOT PROCESSED

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** TEXAS

**MAJOR BASIN** WESTERN GULF

**MINOR BASIN** SABINE RIVER

**STATION LOCATION** SABINE RIVER NEAR
RULIFF, TEXAS

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g |
| 10 | 2 | 61 | 10 | 16 | - | - | - | - | - | - | 4 | 5 | 6 | 5 | 10 | 7 | | | | | |
| 10 | 9 | 61 | 10 | 25 | - | - | - | - | - | - | 5 | 6 | 4 | 6 | 9 | 8 | | | | | |
| 10 | 16 | 61 | 10 | 31 | - | - | - | - | - | - | 4 | 6 | 5 | 7 | 9 | 9 | | | | | |
| 11 | 6 | 61 | 11 | 17 | 1 | 1 | 0 | 0 | 1 | 1 | 13 | 4 | 12 | 5 | 25 | 6 | | | | | |
| 11 | 13 | 61 | 11 | 24 | - | - | - | - | - | - | 16 | 5 | 17 | 6 | 33 | 8 | | | | | |
| 11 | 20 | 61 | 11 | 30 | - | - | - | - | - | - | 8 | 6 | 34 | 6 | 42 | 8 | | | | | |
| 11 | 27 | 61 | 12 | 4 | 0 | 1 | 0 | 1 | 0 | 1 | 31 | 5 | 32 | 5 | 63 | 7 | | | | | |
| 12 | 4 | 61 | 12 | 12 | - | - | - | - | - | - | 16 | 6 | 25 | 6 | 41 | 8 | | | | | |
| 12 | 11 | 61 | 12 | 22 | - | - | - | - | - | - | 20 | 6 | 37 | 7 | 57 | 9 | | | | | |
| 12 | 18 | 61 | 1 | 5 | - | - | - | - | - | - | 63 | 6 | 53 | 5 | 116 | 8 | | | | | |
| 12 | 26 | 61 | 1 | 10 | 1 | 1 | 1 | 1 | 2 | 1 | 25 | 5 | 66 | 5 | 91 | 7 | | | | | |
| 1 | 8 | 62 | 1 | 22 | - | - | - | - | - | - | 49 | 6 | 127 | 8 | 176 | 10 | | | | | |
| 1 | 15 | 62 | 1 | 25 | - | - | - | - | - | - | 73 | 8 | 52 | 7 | 125 | 11 | | | | | |
| 1 | 22 | 62 | 2 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 25 | 5 | 22 | 5 | 47 | 7 | | | | | |
| 1 | 29 | 62 | 2 | 13 | - | - | - | - | - | - | 42 | 7 | 36 | 6 | 78 | 9 | | | | | |
| 2 | 5 | 62 | 2 | 16 | - | - | - | - | - | - | 55 | 7 | 42 | 7 | 97 | 10 | | | | | |
| 2 | 12 | 62 | 2 | 28 | - | - | - | - | - | - | 41 | 4 | 53 | 5 | 94 | 6 | | | | | |
| 2 | 19 | 62 | 3 | 21 | 0 | 1 | 0 | 1 | 0 | 1 | 96 | 7 | 65 | 7 | 161 | 10 | | | | | |
| 2 | 26 | 62 | 3 | 14 | - | - | - | - | - | - | 47 | 5 | 38 | 6 | 85 | 7 | | | | | |
| 3 | 7 | 62 | 3 | 20 | - | - | - | - | - | - | 66 | 7 | 38 | 7 | 104 | 10 | | | | | |
| 3 | 11 | 62 | 3 | 26 | - | - | - | - | - | - | 24 | 6 | 27 | 7 | 51 | 9 | | | | | |
| 3 | 19 | 62 | 4 | 4 | - | - | - | - | - | - | 22 | 6 | 72 | 8 | 94 | 10 | | | | | |
| 3 | 26 | 62 | 4 | 10 | 0 | 1 | 0 | 1 | 0 | 1 | 42 | 5 | 32 | 5 | 74 | 7 | | | | | |
| 4 | 2 | 62 | 4 | 13 | - | - | - | - | - | - | 57 | 7 | 54 | 7 | 111 | 10 | | | | | |
| 4 | 9 | 62 | 4 | 27 | - | - | - | - | - | - | 22 | 6 | 34 | 7 | 56 | 9 | | | | | |
| 4 | 16 | 62 | 5 | 1 | - | - | - | - | - | - | 25 | 6 | 28 | 7 | 53 | 9 | | | | | |
| 4 | 23 | 62 | 5 | 28 | 0 | 1 | 0 | 1 | 0 | 1 | 21 | 6 | 24 | 6 | 45 | 8 | | | | | |
| 4 | 30 | 62 | 6 | 4 | - | - | - | - | - | - | 43 | 8 | 36 | 9 | 79 | 12 | | | | | |
| 5 | 7 | 62 | 6 | 21 | - | - | - | - | - | - | 42 | 27 | 0 | 26 | 42 | 37 | | | | | |
| 5 | 14 | 62 | 6 | 25 | 0 | 1 | 0 | 1 | 0 | 1 | 20 | 6 | 43 | 7 | 63 | 9 | | | | | |
| 5 | 21 | 62 | 6 | 26 | - | - | - | - | - | - | 28 | 7 | 45 | 8 | 73 | 11 | | | | | |
| 5 | 28 | 62 | 6 | 28 | 1 | 1 | 1 | 1 | 2 | 1 | 15 | 6 | 16 | 8 | 31 | 10 | | | | | |
| 6 | 4 | 62 | 7 | 5 | - | - | - | - | - | - | 24 | 10 | 31 | 8 | 55 | 13 | | | | | |
| 6 | 11 | 62 | 7 | 10 | - | - | - | - | - | - | 37 | 12 | 50 | 7 | 87 | 14 | | | | | |
| 6 | 18 | 62 | 8 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 7 | 13 | 8 | 16 | 11 | | | | | |
| 6 | 25 | 62 | 8 | 6 | 0 | 0 | 0 | 1 | 0 | 1 | 17 | 6 | 23 | 7 | 40 | 9 | | | | | |
| 7 | 2 | 62 | 8 | 8 | - | - | - | - | - | - | 17 | 7 | 19 | 8 | 36 | 11 | | | | | |
| 7 | 10 | 62 | 8 | 8 | - | - | - | - | - | - | 10 | 6 | 15 | 10 | 25 | 12 | | | | | |
| 7 | 16 | 62 | 8 | 8 | - | - | - | - | - | - | 11 | 6 | 10 | 6 | 21 | 8 | | | | | |
| 7 | 23 | 62 | 8 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 12 | 7 | 15 | 9 | | | | | |
| 7 | 30 | 62 | 8 | 17 | - | - | - | - | - | - | 5 | 5 | 12 | 6 | 17 | 7 | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** TEXAS
**MAJOR BASIN** WESTERN GULF
**MINOR BASIN** SABINE RIVER
**STATION LOCATION** SABINE RIVER NEAR
RULIFF, TEXAS 73

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 6 | 62 | 8 | 28 | - | - | - | - | - | - | 8 | 6 | 14 | 6 | 22 | 8 | | | | | | |
| 8 | 13 | 62 | 8 | 30 | - | - | - | - | - | - | 8 | 6 | 8 | 7 | 16 | 9 | | | | | | |
| 8 | 20 | 62 | 9 | 12 | - | - | - | - | - | - | 10 | 7 | 16 | 8 | 26 | 11 | | | | | | |
| 8 | 27 | 62 | 9 | 12 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 5 | 17 | 7 | 19 | 8 | | | | | | |
| 9 | 4 | 62 | 10 | 2 | - | - | - | - | - | - | 57 | 31 | 7 | 6 | 64 | 32 | | | | | | |
| 9 | 10 | 62 | 10 | 9 | - | - | - | - | - | - | 14 | 6 | 17 | 7 | 31 | 9 | | | | | | |
| 9 | 17 | 62 | 10 | 15 | - | - | - | - | - | - | 11 | 6 | 12 | 7 | 23 | 9 | | | | | | |
| 9 | 24 | 62 | 10 | 17 | 0 | 1 | 1 | 1 | 1 | 1 | 7 | 5 | 13 | 7 | 20 | 9 | | | | | | |

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 300 | 0 | 0 | 0 | 0 | 100 | 0 | 120 | 60 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 500 | 0 | 0 | 190 | 0 | 80 | 0 | 150 | 80 | 40 | 20 | | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 200 | 0 | 0 | 60 | 0 | 20 | 0 | 80 | 20 | 60 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 0 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 200 | 0 | 0 | 0 | 0 | 40 | 0 | 120 | 60 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 40 | 20 | 80 | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 00 | 0 | 0 | 20 | 0 | 0 | 20 | 0 | 0 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 100 | 0 | 0 | 0 | 0 | 60 | 0 | 60 | 20 | 20 | 20 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 200 | 0 | 0 | 20 | 0 | 70 | 0 | 110 | 20 | 70 | 20 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 100 | 0 | 0 | 0 | 0 | 40 | 100 | 0 | 0 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 800 | 70 | 0 | 90 | 0 | 340 | 0 | 140 | 180 | 20 | 50 | 57 | 1 | 51 | 1 | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 6100 | 20 | 130 | 860 | * | 40 | 190 | 1270 | 530 | 490 | 610 | 50 | 5 | 69 | 4 | 68 | 3 | 30 | 2 | 70 | 2 | 92 | 1 | 65 | 1 | | | | | | |
| 5 | 7 | 62 | 1200 | 0 | 20 | 60 | 210 | 40 | 40 | 410 | 440 | 20 | 20 | 50 | 2 | 92 | 1 | 68 | 1 | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 1200 | 0 | 0 | 350 | 0 | 170 | 20 | 410 | 270 | 40 | 40 | 68 | 2 | | | | | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 1400 | 0 | 0 | 40 | 0 | 0 | 0 | 800 | 590 | 890 | 590 | 69 | 2 | 88 | 1 | 77 | 1 | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 200 | 0 | 0 | 40 | 0 | 20 | 0 | 20 | 80 | 20 | 20 | | | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 12000 | 10190 | 0 | 130 | 0 | 0 | 40 | 1180 | 460 | 460 | 550 | 2 | 7 | 69 | 3 | 68 | 2 | 71 | 1 | 88 | 1 | | | | | | | | | | |
| 7 | 16 | 62 | 8200 | 8200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 4700 | 830 | 40 | 830 | 0 | 80 | 20 | 1740 | 1120 | 460 | 210 | 68 | 4 | 88 | 3 | 3 | 3 | 40 | 1 | 38 | 1 | 2 | 1 | 77 | 1 | | | | | | |
| 9 | 4 | 62 | 2600 | 130 | 0 | 340 | 0 | 40 | 0 | 1480 | 630 | 380 | 460 | 69 | 3 | 68 | 2 | 86 | 2 | | | | | | | | | | | | | | |
| 9 | 10 | 62 | 11600 | 70 | 0 | 110 | 0 | 0 | 0 | 11140 | 270 | 1960 | 50 | 69 | 7 | | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 1600 | 0 | 0 | 170 | 0 | 20 | 20 | 1330 | 90 | 830 | 160 | 68 | 3 | 69 | 1 | 26 | 1 | | | | | | | | | | | | | | |
| *4 | 16 | 62 | | | | | 3080 | | | | | | | | | | | | | | | | | | | | | | | | | | |

**STATION LOCATION** SABINE RIVER NEAR

RULIFF, TEXAS

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | | | | | | | | | | 54370 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 26 | 47 | 68 | 5 | 23 | 5 | 57 | 5 | 38 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | | | | | | | | | | 0 | 0 | 5 | | | | | | | | | | | 1 | | | | | | | 0 | 1 |
| 11 | 20 | 61 | | | | | | | | | | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 26 | 31 | 57 | 8 | 28 | 4 | 65 | 3 | 54 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | | | | | | | | | | 0 | 0 | 15 | 11 | 2 | | | | | | | | | 56 | 51 | 4 | 76 | 4 | | | 1 | 0 |
| 1 | 2 | 62 | | | | | | | | | | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | | | | | | | | | | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | | | | | | | | | | 150 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 57 | 18 | 26 | 12 | 92 | 11 | 82 | 8 | 51 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 92 | 20 | 89 | 9 | 57 | 8 | 14 | 5 | 58 | 40 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 30 |
| 3 | 19 | 62 | | | | | | | | | | 0 | 0 | 8 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 82 | 19 | 57 | 15 | 92 | 13 | 26 | 5 | 48 | 0 | 0 | 8 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 92 | 38 | 74 | 11 | 71 | 10 | 57 | 5 | 36 | 0 | 0 | 25 | 21 | 2 | 11 | 1 | | | | | | | 0 | | | | | | | 1 | 0 |
| 5 | 7 | 62 | 92 | 13 | 65 | 6 | 71 | 6 | 26 | 5 | 70 | 0 | 20 | 40 | 11 | 3 | | | | | | | | | 5 | | | | | | | 0 | 4 |
| 5 | 21 | 62 | 28 | 30 | 57 | 25 | 26 | 19 | 23 | 5 | 21 | 40 | 10 | 9 | 11 | 1 | | | | | | | | | 19 | 73 | 2 | 74 | 2 | 50 | 1 | 0 | 0 |
| 6 | 4 | 62 | 57 | 55 | 82 | 14 | 68 | 6 | 26 | 4 | 21 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 57 | 13 | 92 | 11 | 26 | 9 | 64 | 9 | 58 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 68 | 13 | 57 | 11 | 92 | 8 | 71 | 7 | 61 | 60 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 26 | 77 | 68 | 4 | 58 | 3 | 71 | 3 | 13 | 0 | 0 | 13 | 22 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 58 | 81 | 53 | 7 | 26 | 4 | 71 | 2 | 6 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 10 | 62 | 58 | 95 | 56 | 3 | 26 | 1 | 71 | 1 | | 0 | 0 | 312 | 18 | 5 | 22 | 5 | 7 | 4 | 9 | 3 | 15 | 2 | 9 | 76 | 2 | | | | | 0 | 0 |
| 9 | 17 | 62 | 26 | 67 | 58 | 15 | 57 | 5 | 82 | 5 | 8 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

STATION LOCATION SABINE RIVER NEAR

RULIFF, TEXAS

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | - | - | 7.1 | - | - | - | - | - | - | - | - | 50 | - | - | .1 | - | - |
| 10 | 9 | 61 | - | - | 7.3 | - | - | - | - | - | 34 | 26 | - | 35 | - | - | - | - | - |
| 10 | 16 | 61 | - | - | 7.2 | - | - | - | - | - | - | - | 56 | 20 | - | 24 | .1 | - | - |
| 11 | 6 | 61 | - | - | - | - | - | - | - | - | 40 | 26 | 40 | 15 | 0 | 13 | - | - | - |
| 11 | 13 | 61 | - | - | 7.4 | - | - | - | - | - | 44 | 48 | 28 | - | - | 10 | - | - | - |
| 11 | 14 | 61 | - | - | - | - | 16 | - | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 22 | 61 | - | - | - | - | - | - | - | - | 27 | 10 | 24 | 70 | - | 19 | - | - | - |
| 11 | 27 | 61 | - | - | - | - | - | - | - | - | 24 | 18 | 28 | 40 | - | 13 | .0 | - | - |
| 12 | 4 | 61 | - | - | - | - | - | - | - | - | - | - | - | 30 | - | 13 | .1 | 76 | - |
| 12 | 11 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 23 | - | 139 | - |
| 12 | 18 | 61 | - | - | - | - | - | - | - | - | 16 | 10 | 32 | - | - | - | - | - | - |
| 12 | 26 | 61 | - | - | - | - | 40 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 3 | 62 | - | - | 7.1 | - | - | - | - | - | 16 | - | 40 | 80 | - | - | - | - | - |
| 1 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | 28 | - | - | 16 | - | - | - |
| 1 | 15 | 62 | - | - | - | - | - | - | - | - | 28 | - | 40 | - | - | 24 | - | - | - |
| 1 | 22 | 62 | - | - | - | - | - | - | - | - | 28 | - | 42 | - | 97 | 26 | - | - | - |
| 1 | 29 | 62 | - | - | - | - | - | - | - | - | 23 | - | 18 | 30 | 170 | 22 | - | - | - |
| 2 | 5 | 62 | - | - | - | - | - | - | - | - | 27 | - | - | - | - | 22 | - | - | - |
| 2 | 13 | 62 | - | - | - | - | 25 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 2 | 62 | - | - | - | - | - | - | - | - | 38 | - | 44 | 25 | - | 27 | - | - | - |
| 4 | 9 | 62 | - | - | 7.5 | - | - | - | - | - | 47 | 26 | 68 | - | - | 40 | .1 | - | - |
| 4 | 16 | 62 | - | - | - | - | - | - | - | - | 46 | 28 | 40 | 25 | - | 31 | .3 | - | - |
| 4 | 23 | 62 | - | - | - | - | - | - | - | - | 35 | 24 | 44 | 20 | 65 | 24 | .0 | - | - |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | 33 | 28 | - | 25 | 125 | - | - | - | - |
| 5 | 7 | 62 | - | - | 7.3 | - | - | - | - | - | 14 | 16 | 40 | 35 | 62 | 15 | .0 | - | - |
| 5 | 28 | 62 | - | - | - | - | - | - | - | - | 34 | 32 | 48 | 25 | 25 | 19 | - | - | - |
| 6 | 4 | 62 | - | - | - | - | - | - | - | - | 36 | 32 | 48 | 30 | - | 26 | - | - | - |
| 6 | 11 | 62 | - | - | - | - | - | - | - | - | 23 | - | - | - | - | 15 | - | 115 | - |
| 7 | 2 | 62 | - | - | 7.9 | - | - | - | - | - | 27 | 28 | 48 | 10 | 130 | 13 | .0 | - | - |
| 7 | 10 | 62 | - | - | - | - | - | - | - | - | 51 | - | 60 | 15 | 83 | 20 | .0 | - | - |
| 7 | 16 | 62 | - | - | - | - | - | - | - | - | 34 | 34 | 56 | 25 | *25 | - | - | - | - |
| 7 | 23 | 62 | - | - | - | - | 17 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 13 | 62 | - | - | - | - | - | - | - | - | 49 | 32 | 40 | 15 | - | 13 | .0 | 157 | - |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | 61 | 28 | 40 | 10 | 57 | 17 | .1 | 149 | - |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | 48 | 32 | 36 | 20 | 57 | 14 | .0 | 140 | - |
| 9 | 24 | 62 | - | - | 7.2 | - | - | - | - | - | 56 | 30 | 52 | 15 | 0 | 20 | - | 168 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Ruliff, Texas
Operated by U.S. Geological Survey

STATE Texas

MAJOR BASIN Western Gulf

MINOR BASIN Sabine River

STATION LOCATION Sabine River near
Ruliff, Texas

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.840 | 1.440 | 9.600 | 25.600 | 16.300 | 9.040 | 5.200 | 9.950 | 2.420 | 2.600 | 1.600 | 1.560 |
| 2 | 2.660 | 1.480 | 9.600 | 23.500 | 15.900 | 9.040 | 4.900 | 11.400 | 2.600 | 2.720 | 1.560 | 1.600 |
| 3 | 2.480 | 1.680 | 9.600 | 21.400 | 15.500 | 9.300 | 4.800 | 12.300 | 3.100 | 3.170 | 1.520 | 1.480 |
| 4 | 2.660 | 1.760 | 9.300 | 19.500 | 15.200 | 9.950 | 4.600 | 13.900 | 3.910 | 3.380 | 1.520 | 1.360 |
| 5 | 3.030 | 1.910 | 8.300 | 17.200 | 15.200 | 10.600 | 4.700 | 16.300 | 5.800 | 3.170 | 1.520 | 1.280 |
| 6 | 2.960 | 2.060 | 7.100 | 15.200 | 15.200 | 11.000 | 5.000 | 19.000 | 7.880 | 2.900 | 1.520 | 1.240 |
| 7 | 2.840 | 2.010 | 6.240 | 14.200 | 15.200 | 11.400 | 5.100 | 20.100 | 9.040 | 2.720 | 1.600 | 1.280 |
| 8 | 2.840 | 2.010 | 5.800 | 13.900 | 15.500 | 11.800 | 5.000 | 20.100 | 9.040 | 2.600 | 1.600 | 1.480 |
| 9 | 2.960 | 2.060 | 5.940 | 13.300 | 15.500 | 11.400 | 4.700 | 19.500 | 8.300 | 2.540 | 1.560 | 1.720 |
| 10 | 3.170 | 1.960 | 6.560 | 12.300 | 15.500 | 10.600 | 4.420 | 18.500 | 6.400 | 2.480 | 1.640 | 1.960 |
| 11 | 3.100 | 1.810 | 7.880 | 11.000 | 15.200 | 9.950 | 4.240 | 18.000 | 5.200 | 2.420 | 1.760 | 2.060 |
| 12 | 2.900 | 1.760 | 9.950 | 9.950 | 14.200 | 9.300 | 4.510 | 17.200 | 4.600 | 2.360 | 1.860 | 2.060 |
| 13 | 2.660 | 2.330 | 11.800 | 9.300 | 12.800 | 9.040 | 5.100 | 16.700 | 4.600 | 2.310 | 1.860 | 2.110 |
| 14 | 2.480 | 4.580 | 14.800 | 8.780 | 10.600 | 9.300 | 5.800 | 15.900 | 5.100 | 2.210 | 1.760 | 2.010 |
| 15 | 2.310 | 7.020 | 18.500 | 8.300 | 8.780 | 9.950 | 6.920 | 14.800 | 5.940 | 2.110 | 1.680 | 1.910 |
| 16 | 2.160 | 9.300 | 22.800 | 8.300 | 7.680 | 10.600 | 7.880 | 13.300 | 6.400 | 1.960 | 1.520 | 1.810 |
| 17 | 2.060 | 10.300 | 27.700 | 8.780 | 7.280 | 11.000 | 8.780 | 11.400 | 6.080 | 1.810 | 1.360 | 1.810 |
| 18 | 1.910 | 10.300 | 32.000 | 9.300 | 7.680 | 11.400 | 9.040 | 9.950 | 5.000 | 1.680 | 1.240 | 1.860 |
| 19 | 1.810 | 9.300 | 34.200 | 10.600 | 7.680 | 11.400 | 9.040 | 8.780 | 4.150 | 1.600 | 1.160 | 1.960 |
| 20 | 1.760 | 7.680 | 37.200 | 11.400 | 7.100 | 11.000 | 8.520 | 8.080 | 4.330 | 1.520 | 1.040 | 2.010 |
| 21 | 1.680 | 5.940 | 38.000 | 12.300 | 6.920 | 10.300 | 7.280 | 6.920 | 5.000 | 1.480 | 1.010 | 2.110 |
| 22 | 1.640 | 4.800 | 36.500 | 13.600 | 6.560 | 9.300 | 5.940 | 5.540 | 5.660 | 1.480 | .975 | 2.210 |
| 23 | 1.600 | 4.600 | 34.200 | 14.200 | 6.740 | 8.780 | 4.800 | 4.420 | 5.540 | 1.520 | .940 | 2.260 |
| 24 | 1.600 | 5.800 | 33.500 | 14.800 | 7.480 | 8.080 | 4.150 | 3.670 | 4.700 | 1.560 | .905 | 2.260 |
| 25 | 1.560 | 7.880 | 32.000 | 14.800 | 8.080 | 7.680 | 3.830 | 3.240 | 3.670 | 1.640 | .905 | 2.260 |
| 26 | 1.520 | 8.780 | 31.200 | 15.200 | 8.780 | 7.480 | 3.910 | 2.900 | 3.030 | 1.600 | .870 | 2.210 |
| 27 | 1.480 | 9.300 | 30.500 | 15.500 | 9.040 | 7.280 | 4.420 | 2.720 | 2.720 | 1.520 | .888 | 2.160 |
| 28 | 1.440 | 9.300 | 29.800 | 15.900 | 9.040 | 7.100 | 5.660 | 2.540 | 2.420 | 1.440 | .905 | 2.010 |
| 29 | 1.440 | 9.300 | 29.100 | 17.200 |  | 6.560 | 7.280 | 2.420 | 2.260 | 1.440 | 1.040 | 1.860 |
| 30 | 1.440 | 9.300 | 28.400 | 17.600 |  | 6.080 | 8.520 | 2.420 | 2.360 | 1.560 | 1.120 | 1.720 |
| 31 | 1.440 |  | 27.000 | 17.200 |  | 5.540 |  | 2.420 |  | 1.600 | 1.280 |  |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** CALIFORNIA
**MAJOR BASIN** CALIFORNIA
**MINOR BASIN** SACRAMENTO RIVER
**STATION LOCATION** SACRAMENTO RIVER AT
GREENS LANDING ABOVE
COURTLAND, CALIFORNIA

116

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 7 | 13 | 62 | 4300 | 0 | 0 | 300 | 460 | 170 | 130 | 2030 | 1220 | 340 | 1350 | 68 | 4 | 71 | 2 | 50 | 2 | 92 | 1 | 24 | 1 | 51 | 1 | 69 | 1 | | | | | | |
| 8 | 20 | 62 | 2700 | 0 | 60 | 80 | 340 | 150 | 0 | 840 | 1270 | 420 | 840 | 92 | 2 | 71 | 2 | 50 | 2 | 68 | 2 | 88 | 1 | 69 | 1 | | | | | | | | |
| 9 | 4 | 62 | 200 | 0 | 0 | 30 | 0 | 40 | 0 | 80 | 10 | 100 | 370 | | | | | | | | | | | | | | | | | | | | |
| 9 | 14 | 62 | 300 | 0 | 0 | 90 | 0 | 20 | 0 | 140 | 30 | 110 | 230 | | | | | | | | | | | | | | | | | | | | |

**MINOR BASIN** SACRAMENTO RIVER

**STATION LOCATION** SACRAMENTO RIVER AT

GREENS LANDING ABOVE

COURTLAND, CALIFORNIA 116

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 7 | 13 | 62 | 92 | 18 | 56 | 11 | 57 | 7 | 26 | 6 | 58 | 0 | 0 | 23 | 2 | 1 | 15 | 1 | | | | | | | 3 | 76 | 1 | | | | | 0 | 0 |
| 8 | 20 | 62 | 56 | 40 | 92 | 14 | 47 | 6 | 82 | 4 | 36 | 40 | 0 | 39 | 22 | 2 | 20 | 2 | 11 | 1 | | | | | 1 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 82 | 16 | 56 | 14 | 2 | 7 | 47 | 7 | 56 | 0 | 0 | 20 | 17 | 1 | 11 | 1 | | | | | | | 6 | 50 | 2 | | | | | 2 | 0 |
| 9 | 14 | 62 | 56 | 43 | 95 | 8 | 82 | 8 | 47 | 3 | 38 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

## RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** CALIFORNIA
**MINOR BASIN** SACRAMENTO RIVER
**STATION LOCATION** SACRAMENTO RIVER AT
GREENS LANDING ABOVE
COURTLAND, CALIFORNIA 116

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 5 | 31 | 62 | 7 | 5 | 0 | 1 | 1 | 1 | 1 | 1 | 3 | 6 | 4 | 7 | 7 | 9 | | | | | | |
| 6 | 7 | 62 | 7 | 5 | 1 | 1 | 0 | 1 | 1 | 1 | 16 | 6 | 0 | 5 | 16 | 7 | | | | | | |
| 6 | 14 | 62 | 7 | 16 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 5 | 7 | 6 | 11 | 7 | | | | | | |
| 6 | 20 | 62 | 8 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 9 | 5 | 14 | 6 | 23 | 7 | | | | | | |
| 6 | 29 | 62 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 4 | 6 | 7 | 8 | | | | | | |
| 7 | 5 | 62 | 8 | 6 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 6 | 9 | 7 | 11 | 9 | | | | | | |
| 8 | 9 | 62 | 8 | 23 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 6 | 8 | 6 | 9 | 8 | | | | | | |
| 8 | 20 | 62 | 9 | 11 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 6 | 9 | 7 | 15 | 9 | | | | | | |
| 9 | 4 | 62 | 9 | 20 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 5 | 4 | 6 | 6 | 8 | | | | | | |
| 9 | 13 | 62 | 10 | 10 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 5 | 6 | 6 | 10 | 7 | | | | | | |
| 9 | 19 | 62 | 10 | 17 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 5 | 3 | 5 | 6 | 7 | | | | | | |

*(Parts per billion)*

**STATION LOCATION** SACRAMENTO RIVER AT
GREENS LANDING ABOVE
COURTLAND, CALIFORNIA 116

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 4 | 24 | 62 | 5 | 7 | 7831# | 90 | 38 | 52 | 1 | 10 | 12 | 1 | 1 | 8 | 2 | 4 | 2 | 1 | 8 |
| 5 | 23 | 62 | 6 | 8 | 5407 | 152 | 56 | 96 | 1 | 15 | 17 | 2 | 1 | 13 | 1 | 7 | 5 | 1 | 10 |
| 7 | 6 | 62 | 7 | 20 | 9032 | 87 | 40 | 47 | 1 | 11 | 13 | 2 | 1 | 9 | 1 | 5 | 3 | 1 | 6 |
| 8 | 9 | 62 | 8 | 30 | 3209 | 199 | 53 | 146 | 1 | 13 | 21 | 3 | 2 | 16 | 0 | 6 | 3 | 1 | 8 |
| 9 | 5 | 62 | 10 | 9 | 8880 | 85 | 36 | 49 | 1 | 8 | 13 | 2 | 1 | 10 | 0 | 4 | 3 | 1 | 6 |

# ESTIMATED

**MINOR BASIN** SACRAMENTO RIVER

**STATION LOCATION** SACRAMENTO RIVER AT
GREENS LANDING ABOVE
COURTLAND, CALIFORNIA 116

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 14000 |
| 7 | 20 | 62 | - | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 14 | 62 | 20.0 | 6.4 | 7.3 | 1.9 | - | - | - | - | - | - | - | - | - | - | - | - | 7500 |
| 9 | 19 | 62 | - | - | 7.6 | - | - | - | - | - | 10 | 74 | 64 | 5 | *25 | 13 | .0 | - | - |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Sacramento, California
Operated by U.S. Geological Survey

MAJOR BASIN California

MINOR BASIN Sacramento River

STATION LOCATION Sacramento River at
Greens Landing above Courtland, Calif.

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7.930 | 7.360 | 13.500 | 10.200 | 9.250 | 35.100 | 27.700 | 22.000 | 17.400 | 9.840 | 10.500 | 11.700 |
| 2 | 7.540 | 7.400 | 19.000 | 9.910 | 9.380 | 35.100 | 28.100 | 20.600 | 16.700 | 10.400 | 10.600 | 11.700 |
| 3 | 7.180 | 7.400 | 28.500 | 8.940 | 9.380 | 40.100 | 28.800 | 19.800 | 16.600 | 10.300 | 10.700 | 12.000 |
| 4 | 6.960 | 7.450 | 32.300 | 9.030 | 9.470 | 41.000 | 29.200 | 20.300 | 16.200 | 10.100 | 10.700 | 12.300 |
| 5 | 6.740 | 7.580 | 30.900 | 8.810 | 9.250 | 39.800 | 29.900 | 21.300 | 15.400 | 10.300 | 11.100 | 12.600 |
| 6 | 7.010 | 7.360 | 27.200 | 9.080 | 8.940 | 40.000 | 30.700 | 22.300 | 13.800 | 10.200 | 11.300 | 13.100 |
| 7 | 7.100 | 7.100 | 23.900 | 9.160 | 9.870 | 47.700 | 31.600 | 23.100 | 12.600 | 10.000 | 11.000 | 13.600 |
| 8 | 6.700 | 7.100 | 18.300 | 9.210 | 10.400 | 54.400 | 32.200 | 23.300 | 12.400 | 9.810 | 11.200 | 13.500 |
| 9 | 6.660 | 7.010 | 15.900 | 9.300 | 16.700 | 57.900 | 32.800 | 23.400 | 12.500 | 9.890 | 11.300 | 13.900 |
| 10 | 7.050 | 7.230 | 14.400 | 9.470 | 38.200 | 59.700 | 33.500 | 23.900 | 12.400 | 9.980 | 11.700 | 13.600 |
| 11 | 6.790 | 7.230 | 13.200 | 9.160 | 60.400 | 58.900 | 33.300 | 24.300 | 12.800 | 10.200 | 12.100 | 13.000 |
| 12 | 6.660 | 7.010 | 12.000 | 9.160 | 63.300 | 56.100 | 32.600 | 23.200 | 13.100 | 10.300 | 12.400 | 12.800 |
| 13 | 6.790 | 7.050 | 11.500 | 9.250 | 62.200 | 51.700 | 30.900 | 22.000 | 13.000 | 10.200 | 12.200 | 12.600 |
| 14 | 7.010 | 7.270 | 10.700 | 8.810 | 64.000 | 46.400 | 30.400 | 21.500 | 12.900 | 10.300 | 12.100 | 13.000 |
| 15 | 7.050 | 7.400 | 10.500 | 8.420 | 68.200 | 41.400 | 30.800 | 20.600 | 12.700 | 10.400 | 12.000 | 13.000 |
| 16 | 6.960 | 7.450 | 10.300 | 8.420 | 70.100 | 38.000 | 32.000 | 19.700 | 13.800 | 10.300 | 11.700 | 12.800 |
| 17 | 6.880 | 7.540 | 10.300 | 8.200 | 70.000 | 35.200 | 31.800 | 19.700 | 14.000 | 10.300 | 11.700 | 12.300 |
| 18 | 6.920 | 7.450 | 10.100 | 8.110 | 68.700 | 33.000 | 30.000 | 19.900 | 14.000 | 10.600 | 11.300 | 12.100 |
| 19 | 7.360 | 7.540 | 9.980 | 7.930 | 66.500 | 31.300 | 27.800 | 19.100 | 13.800 | 10.400 | 11.500 | 11.800 |
| 20 | 7.100 | 7.450 | 10.000 | 9.790 | 64.700 | 29.700 | 26.300 | 18.600 | 13.200 | 10.100 | 11.700 | 12.000 |
| 21 | 7.050 | 7.930 | 11.200 | 18.000 | 63.200 | 28.500 | 25.000 | 17.800 | 12.800 | 10.100 | 11.800 | 11.600 |
| 22 | 7.010 | 7.930 | 19.300 | 21.500 | 61.400 | 27.700 | 23.100 | 16.800 | 12.700 | 10.300 | 11.800 | 11.300 |
| 23 | 7.180 | 8.060 | 21.700 | 18.600 | 58.900 | 29.300 | 22.300 | 16.300 | 12.500 | 10.500 | 11.600 | 11.300 |
| 24 | 6.960 | 8.460 | 18.500 | 15.100 | 55.600 | 28.900 | 22.500 | 16.900 | 11.300 | 10.300 | 11.200 | 11.300 |
| 25 | 6.960 | 8.420 | 15.600 | 12.400 | 51.100 | 28.000 | 23.200 | 17.000 | 10.300 | 10.400 | 11.300 | 11.300 |
| 26 | 7.100 | 9.270 | 13.300 | 11.600 | 46.700 | 26.400 | 23.400 | 16.400 | 9.860 | 10.500 | 11.700 | 11.200 |
| 27 | 7.320 | 11.600 | 11.900 | 10.900 | 41.200 | 25.500 | 23.100 | 16.100 | 10.300 | 10.200 | 11.800 | 10.700 |
| 28 | 7.540 | 13.700 | 11.300 | 10.200 | 37.000 | 25.600 | 22.700 | 15.800 | 10.900 | 10.200 | 11.800 | 10.400 |
| 29 | 7.360 | 13.100 | 10.500 | 9.210 |  | 26.000 | 25.600 | 15.900 | 10.500 | 10.300 | 12.000 | 10.400 |
| 30 | 7.270 | 12.600 | 10.500 | 9.080 |  | 26.400 | 25.900 | 17.200 | 9.870 | 10.500 | 12.000 | 10.500 |
| 31 | 7.490 |  | 10.200 | 9.600 |  | 26.700 |  | 17.400 |  | 10.400 | 12.000 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** NEW YORK
**MAJOR BASIN** NORTHEAST
**MINOR BASIN** ST. LAWRENCE RIVER
**STATION LOCATION** ST. LAWRENCE RIVER AT
MASSENA, NEW YORK 63

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 16 | - | - | - | - | - | - | 3 | 5 | 6 | 7 | 9 | 8 | | | | | | |
| 10 | 9 | 61 | 10 | 27 | - | - | - | - | - | - | 4 | 5 | 5 | 7 | 9 | 9 | | | | | | |
| 10 | 16 | 61 | 11 | 1 | - | - | - | - | - | - | 1 | 5 | 7 | 7 | 8 | 8 | | | | | | |
| 10 | 23 | 61 | 11 | 2 | - | - | - | - | - | - | 2 | 5 | 3 | 7 | 5 | 8 | | | | | | |
| 10 | 30 | 61 | 11 | 6 | - | - | - | - | - | - | 6 | 5 | 17 | 7 | 23 | 8 | | | | | | |
| 10 | 31 | 61 | 11 | 16 | - | - | - | - | - | - | 8 | 6 | 4 | 6 | 12 | 8 | | | | | | |
| 11 | 6 | 61 | 11 | 17 | - | - | - | - | - | - | 10 | 5 | 34 | 7 | 44 | 9 | | | | | | |
| 11 | 13 | 61 | 11 | 28 | - | - | - | - | - | - | 7 | 6 | 22 | 7 | 29 | 9 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 4 | 10 | 5 | 13 | 6 | | | | | | |
| 11 | 27 | 61 | 12 | 11 | - | - | - | - | - | - | 5 | 5 | 17 | 7 | 22 | 9 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | - | - | - | - | - | - | 6 | 5 | 19 | 7 | 25 | 9 | | | | | | |
| 12 | 11 | 61 | 12 | 19 | - | - | - | - | - | - | 9 | 4 | 20 | 6 | 29 | 7 | | | | | | |
| 12 | 18 | 61 | 1 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 4 | 15 | 5 | 22 | 6 | | | | | | |
| 12 | 26 | 61 | 1 | 10 | - | - | - | - | - | - | 0 | 5 | 9 | 7 | 9 | 9 | | | | | | |
| 1 | 3 | 62 | 1 | 17 | - | - | - | - | - | - | 9 | 5 | 12 | 7 | 21 | 9 | | | | | | |
| 1 | 8 | 62 | 1 | 18 | - | - | - | - | - | - | 7 | 5 | 12 | 7 | 19 | 9 | | | | | | |
| 1 | 15 | 62 | 1 | 24 | - | - | - | - | - | - | 19 | 4 | 15 | 5 | 34 | 7 | | | | | | |
| 1 | 22 | 62 | 1 | 31 | - | - | - | - | - | - | 9 | 6 | 21 | 7 | 30 | 9 | | | | | | |
| 1 | 29 | 62 | 2 | 12 | - | - | - | - | - | - | 5 | 5 | 10 | 7 | 15 | 9 | | | | | | |
| 2 | 12 | 62 | 2 | 28 | - | - | - | - | - | - | 6 | 5 | 17 | 7 | 23 | 9 | | | | | | |
| 2 | 19 | 62 | 3 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 4 | 9 | 5 | 14 | 6 | | | | | | |
| 2 | 26 | 62 | 3 | 12 | - | - | - | - | - | - | 0 | 5 | 2 | 7 | 2 | 9 | | | | | | |
| 3 | 5 | 62 | 3 | 14 | - | - | - | - | - | - | 7 | 4 | 15 | 5 | 22 | 6 | | | | | | |
| 3 | 12 | 62 | 3 | 23 | - | - | - | - | - | - | 11 | 4 | 15 | 5 | 26 | 6 | | | | | | |
| 3 | 19 | 62 | 3 | 30 | 0 | 0 | 0 | 1 | 0 | 1 | 11 | 4 | 16 | 5 | 27 | 6 | | | | | | |
| 3 | 26 | 62 | 4 | 5 | - | - | - | - | - | - | 13 | 5 | 25 | 7 | 38 | 9 | | | | | | |
| 4 | 2 | 62 | 4 | 13 | - | - | - | - | - | - | 17 | 6 | 25 | 7 | 42 | 9 | | | | | | |
| 4 | 9 | 62 | 4 | 24 | - | - | - | - | - | - | 22 | 6 | 22 | 7 | 44 | 9 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | 1 | 1 | 0 | 1 | 1 | 1 | 8 | 4 | 14 | 5 | 22 | 6 | | | | | | |
| 4 | 23 | 62 | 5 | 23 | - | - | - | - | - | - | 35 | 12 | 20 | 9 | 55 | 15 | | | | | | |
| 4 | 30 | 62 | 6 | 25 | - | - | - | - | - | - | 24 | 5 | 19 | 6 | 43 | 7 | | | | | | |
| 5 | 7 | 62 | 6 | 18 | - | - | - | - | - | - | 1 | 7 | 0 | 7 | 1 | 10 | | | | | | |
| 5 | 14 | 62 | 6 | 22 | - | - | - | - | - | - | 8 | 7 | 0 | 6 | 8 | 8 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | 0 | 1 | 2 | 1 | 2 | 1 | 6 | 5 | 11 | 7 | 17 | 9 | | | | | | |
| 5 | 28 | 62 | 7 | 2 | - | - | - | - | - | - | 8 | 5 | 10 | 7 | 18 | 9 | | | | | | |
| 6 | 4 | 62 | 7 | 5 | - | - | - | - | - | - | 1 | 5 | 9 | 8 | 10 | 9 | | | | | | |
| 6 | 11 | 62 | 7 | 13 | - | - | - | - | - | - | 3 | 3 | 13 | 5 | 16 | 6 | | | | | | |
| 6 | 18 | 62 | 8 | 6 | 1 | 1 | 0 | 1 | 1 | 1 | 15 | 9 | 0 | 32 | 15 | 33 | | | | | | |
| 6 | 25 | 62 | 7 | 19 | - | - | - | - | - | - | 2 | 5 | 14 | 7 | 16 | 9 | | | | | | |
| 7 | 3 | 62 | 8 | 1 | - | - | - | - | - | - | 0 | 8 | 9 | 7 | 9 | 11 | | | | | | |
| 7 | 9 | 62 | 10 | 6 | - | - | - | - | - | - | 3 | 5 | 12 | 7 | 15 | 9 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | ALPHA | | BETA | | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | | MO. | DAY | μμc/g | ± | μμc/g | ± | |
| 7 | 16 | 62 | 8 | 9 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 5 | 34 | 7 | 38 | 8 | | | | | | | | |
| 7 | 23 | 62 | 8 | 20 | - | - | - | - | - | - | 3 | 5 | 16 | 7 | 19 | 8 | | | | | | | | |
| 7 | 30 | 62 | 8 | 21 | - | - | - | - | - | - | 2 | 5 | 9 | 6 | 11 | 7 | | | | | | | | |
| 8 | 6 | 62 | 8 | 23 | - | - | - | - | - | - | 2 | 5 | 10 | 7 | 12 | 9 | | | | | | | | |
| 8 | 13 | 62 | 8 | 29 | - | - | - | - | - | - | 6 | 6 | 7 | 7 | 13 | 9 | | | | | | | | |
| 8 | 20 | 62 | 9 | 6 | 0 | 0 | 0 | 1 | 0 | 1 | 8 | 6 | 4 | 8 | 12 | 10 | | | | | | | | |
| 8 | 27 | 62 | 9 | 18 | - | - | - | - | - | - | 5 | 6 | 14 | 10 | 19 | 12 | | | | | | | | |
| 9 | 4 | 62 | 10 | 6 | - | - | - | - | - | - | 4 | 5 | 10 | 7 | 14 | 9 | | | | | | | | |
| 9 | 10 | 62 | 10 | 11 | - | - | - | - | - | - | 2 | 5 | 8 | 7 | 10 | 9 | | | | | | | | |
| 9 | 17 | 62 | 10 | 8 | 1 | 1 | 1 | 1 | 2 | 1 | 5 | 5 | 13 | 7 | 18 | 9 | | | | | | | | |
| 9 | 24 | 62 | 12 | 14 | - | - | - | - | - | - | 0 | 7 | 10 | 8 | 10 | 11 | | | | | | | | |

**STATION LOCATION** ST. LAWRENCE RIVER AT
MASSENA, NEW YORK

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 600 | 0 | 0 | 40 | 0 | 80 | 20 | 230 | 210 | 40 | 210 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 200 | 0 | 0 | 40 | 0 | 20 | 0 | 170 | 0 | 0 | 60 | | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 1000 | 0 | 20 | 120 | 0 | 80 | 20 | 480 | 230 | 40 | 120 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 300 | 0 | 0 | 20 | 0 | 20 | 60 | 150 | 80 | 20 | 80 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 00 | 0 | 0 | 20 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 2500 | 70 | 20 | 50 | 20 | 250 | 180 | 320 | 1580 | 0 | 20 | 77 | 3 | 99 | 1 | 71 | 1 | 51 | 1 | 60 | 1 | | | | | | | | | | |
| 1 | 3 | 62 | 400 | 0 | 20 | 40 | 0 | 0 | 0 | 100 | 190 | 20 | 40 | | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 500 | 0 | 0 | 40 | 0 | 0 | 20 | 100 | 370 | 60 | 40 | 77 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 12 | 62 | 1300 | 0 | 80 | 100 | 0 | 0 | 0 | 680 | 380 | 0 | 20 | 71 | 3 | 77 | 1 | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 2500 | 350 | 40 | 330 | 0 | 0 | 40 | 1140 | 620 | 150 | 20 | 71 | 3 | 3 | 2 | 82 | 1 | 25 | 1 | 69 | 1 | 77 | 1 | | | | | | | | |
| 3 | 5 | 62 | 500 | 0 | 40 | 20 | 0 | 0 | 0 | 210 | 190 | 0 | 80 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 2600 | 0 | 20 | 170 | 0 | 40 | 20 | 1720 | 660 | 120 | 80 | 71 | 4 | 77 | 1 | 82 | 1 | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 2300 | 0 | 40 | 190 | 0 | 40 | 20 | 1300 | 700 | 500 | 190 | 71 | 4 | 82 | 1 | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 800 | 0 | 20 | 70 | 0 | 20 | 20 | 160 | 500 | 200 | 270 | 77 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 1100 | 0 | 60 | 110 | 20 | 60 | 60 | 460 | 360 | 230 | 190 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 1700 | 0 | 130 | 170 | 130 | 460 | 60 | 400 | 380 | 300 | 550 | 57 | 2 | 71 | 2 | 84 | 1 | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 600 | 0 | 0 | 210 | 0 | 0 | 0 | 250 | 130 | 40 | 110 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 1800 | 20 | 60 | 60 | 20 | 290 | 250 | 230 | 850 | 80 | 290 | 51 | 1 | 60 | 1 | 79 | 1 | | | | | | | | | | | | | | |
| 7 | 3 | 62 | 300 | 0 | 0 | 40 | 0 | 0 | 40 | 130 | 40 | 40 | 40 | | | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 200 | 0 | 0 | 20 | 0 | 60 | 40 | 40 | 40 | 40 | 20 | | | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 400 | 0 | 0 | 0 | 0 | 40 | 230 | 40 | 120 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 300 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 210 | 0 | 210 | | | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 900 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 680 | 170 | 210 | 88 | 2 | | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 300 | 0 | 40 | 60 | 0 | 0 | 0 | 40 | 170 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

## PLANKTON POPULATION

**STATE** NEW YORK
**MAJOR BASIN** NORTHEAST
**MINOR BASIN** ST. LAWRENCE RIVER
**STATION LOCATION** ST. LAWRENCE RIVER AT
MASSENA, NEW YORK 063

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable)* *Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable)* *Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 82 | 19 | 16 | 15 | 45 | 10 | 80 | 6 | 50 | 0 | 0 | 7 | 11 | 1 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 47 | 12 | 59 | 11 | 82 | 11 | 16 | 10 | 56 | 0 | 0 | 2 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 80 | 12 | 45 | 11 | 95 | 10 | 16 | 10 | 57 | 0 | 0 | 9 | 11 | 1 | | | | | | | | | 13 | 51 | 3 | | | | | 1 | 0 |
| 11 | 20 | 61 | 45 | 16 | 16 | 12 | 95 | 12 | 9 | 9 | 51 | 0 | 0 | 17 | 11 | 2 | 17 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 9 | 15 | 45 | 12 | 95 | 12 | 47 | 11 | 50 | 0 | 0 | 27 | 11 | 3 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 95 | 16 | 16 | 14 | 80 | 11 | 9 | 9 | 50 | 110 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 3 | 62 | 9 | 32 | 59 | 29 | 47 | 7 | 95 | 7 | 25 | 0 | 0 | 10 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 9 | 27 | 59 | 19 | 95 | 9 | 47 | 6 | 39 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 12 | 62 | 59 | 31 | 95 | 15 | 35 | 15 | 47 | 14 | 25 | 40 | 0 | 6 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 59 | 21 | 95 | 15 | 47 | 13 | 82 | 9 | 42 | 310 | 10 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 82 | 23 | 95 | 15 | 9 | 14 | 59 | 12 | 36 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 82 | 34 | 9 | 19 | 95 | 15 | 47 | 7 | 25 | 40 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 82 | 14 | 9 | 12 | 47 | 11 | 35 | 24 | 39 | 40 | 0 | 5 | | | | | | | | | | | 2 | | | | | | | 2 | 0 |
| 4 | 16 | 62 | 82 | 26 | 9 | 25 | 95 | 7 | 47 | 6 | 36 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 47 | 35 | 82 | 30 | 95 | 13 | 9 | 6 | 16 | 0 | 0 | 18 | 14 | 2 | 21 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 47 | 55 | 95 | 11 | 82 | 10 | 80 | 6 | 18 | 40 | 0 | 79 | 17 | 3 | 21 | 3 | 14 | 2 | 11 | 2 | | | 2 | | | | | | | 1 | 0 |
| 6 | 4 | 62 | 95 | 20 | 47 | 16 | 59 | 15 | 82 | 14 | 35 | 0 | 0 | 84 | 11 | 3 | 17 | 2 | 21 | 2 | 10 | 1 | 46 | 1 | 8 | 50 | 2 | | | | | 0 | 1 |
| 6 | 18 | 62 | 47 | 15 | 15 | 11 | 95 | 8 | 45 | 7 | 59 | 0 | 0 | 95 | 11 | 3 | 21 | 3 | 17 | 1 | 46 | 1 | | | 18 | 51 | 2 | 76 | 2 | 50 | 1 | 5 | 1 |
| 7 | 3 | 62 | 80 | 18 | 95 | 14 | 16 | 9 | 45 | 5 | 54 | 0 | 0 | 125 | 17 | 4 | 11 | 3 | 46 | 1 | | | | | 24 | 51 | 3 | 76 | 2 | 50 | 1 | 0 | 0 |
| 7 | 16 | 62 | 47 | 14 | 95 | 10 | 80 | 8 | 45 | 8 | 60 | 0 | 0 | 89 | 17 | 4 | 11 | 2 | | | | | | | 25 | 51 | 3 | 50 | 1 | 76 | 1 | 0 | 0 |
| 8 | 6 | 62 | 47 | 22 | 16 | 19 | 76 | 10 | 80 | 5 | 44 | 0 | 0 | 111 | 11 | 3 | 17 | 3 | 6 | 2 | 21 | 2 | | | 21 | 76 | 2 | 51 | 2 | 53 | 1 | 20 | 0 |
| 8 | 20 | 62 | 16 | 21 | 76 | 21 | 27 | 9 | 95 | 5 | 44 | 0 | 0 | 258 | 17 | 5 | 4 | 5 | 11 | 3 | 21 | 1 | | | 15 | 50 | 2 | 51 | 2 | 77 | 1 | 45 | 0 |
| 9 | 4 | 62 | 70 | 47 | 47 | 8 | 26 | 5 | 45 | 5 | 35 | 0 | 0 | 170 | 17 | 5 | 11 | 2 | 5 | 1 | 22 | 1 | 21 | 1 | 0 | | | | | | | 33 | 0 |
| 9 | 17 | 62 | 16 | 22 | 2 | 21 | 82 | 5 | 95 | 5 | 47 | 0 | 0 | 14 | 17 | 1 | | | | | | | | | 6 | 51 | 2 | | | | | 0 | 0 |

***RESULTS IN MICROGRAMS PER LITER***
*(Parts per billion)*

ST. LAWRENCE RIVER

**STATION LOCATION** ST. LAWRENCE RIVER AT
MASSENA, NEW YORK

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 31 | 61 | 11 | 14 | 5064 | 154 | 50 | 104 | 1 | 14 | 16 | 1 | 2 | 11 | 2 | 5 | 4 | 1 | 9 |
| 12 | 14 | 61 | 12 | 30 | 5260 | 116 | 35 | 81 | 0 | 11 | 12 | 1 | 2 | 8 | 1 | 4 | 1 | 1 | 6 |
| 1 | 23 | 62 | 3 | 13 | 4884 | 188 | 50 | 138 | 2 | 9 | 23 | 2 | 4 | 15 | 2 | 7 | 3 | 1 | 5 |
| 4 | 4 | 62 | 4 | 25 | 5078 | 195 | 72 | 123 | 2 | 17 | 22 | 2 | 4 | 15 | 1 | 10 | 7 | 1 | 13 |
| 5 | 16 | 62 | 7 | 13 | 5879 | 130 | 51 | 79 | 1 | 11 | 18 | 1 | 3 | 13 | 1 | 7 | 4 | 0 | 10 |
| 8 | 7 | 62 | 9 | 14 | 5664 | 143 | 40 | 103 | 1 | 9 | 17 | 1 | 3 | 11 | 2 | 5 | 3 | 1 | 4 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 19.4 | - | 8.1 | - | - | - | - | - | 30 | 85 | 120 | 0 | 96 | - | - | 201 | 140 |
| 10 | 9 | 61 | 16.7 | - | 8.1 | - | - | - | - | - | 30 | 86 | 123 | 0 | 15 | - | - | 203 | 140 |
| 10 | 10 | 61 | - | - | - | - | 9 | - | - | - | - | - | - | - | - | - | - | - | - |
| 10 | 16 | 61 | 15.0 | - | 8.0 | - | - | - | - | - | 24 | 84 | 128 | 5 | 15 | - | - | 229 | 110 |
| 10 | 23 | 61 | 13.9 | - | 7.9 | - | - | - | - | - | 24 | 86 | 129 | 5 | 15 | - | - | 201 | *5 |
| 10 | 30 | 61 | 13.9 | - | 7.8 | - | - | - | - | - | 24 | 86 | 127 | 0 | 15 | - | - | 195 | 150 |
| 11 | 6 | 61 | 12.2 | - | 7.9 | - | - | - | - | - | 19 | 87 | 123 | 0 | 15 | 28 | .1 | 177 | 600 |
| 11 | 13 | 61 | 11.7 | - | 7.8 | - | - | - | - | - | 28 | 88 | 124 | 0 | 15 | 28 | .0 | 186 | 140 |
| 11 | 14 | 61 | - | - | - | - | 11 | - | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 20 | 61 | 6.7 | - | 7.7 | - | - | - | - | - | 28 | 84 | 128 | 0 | 10 | 16 | .0 | 180 | 180 |
| 11 | 27 | 61 | 7.2 | - | 8.0 | - | - | - | - | - | 30 | 86 | 123 | 0 | 10 | - | - | 188 | 45 |
| 12 | 4 | 61 | 6.7 | - | 8.1 | - | - | - | - | - | 28 | 84 | 121 | 0 | 15 | - | - | 178 | 120 |
| 12 | 11 | 61 | 3.9 | - | 8.2 | - | - | - | - | - | 34 | 84 | 121 | 0 | 15 | - | - | 167 | - |
| 12 | 14 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 27 | .0 | - | - |
| 12 | 18 | 61 | 3.3 | - | 8.2 | - | - | - | - | - | 27 | 87 | 123 | 0 | 25 | 30 | .0 | 192 | - |
| 12 | 26 | 61 | 1.7 | - | 8.2 | - | - | - | - | - | 24 | 86 | 124 | 0 | 15 | - | - | 180 | - |
| 12 | 30 | 61 | - | - | - | - | 10 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 3 | 62 | - | - | 8.2 | - | - | - | - | - | 24 | 91 | 128 | 0 | 20 | - | - | 193 | - |
| 1 | 8 | 62 | .6 | - | 8.1 | - | - | - | - | - | 24 | 89 | 125 | 0 | 15 | 30 | - | 179 | - |
| 1 | 15 | 62 | .8 | - | 7.8 | - | - | - | - | - | 26 | 91 | 129 | 0 | 25 | - | - | 201 | - |
| 1 | 22 | 62 | .6 | - | 7.6 | - | - | - | - | - | 28 | 84 | 122 | 0 | 15 | 27 | .1 | 194 | - |
| 1 | 26 | 62 | .0 | - | 8.1 | - | - | - | - | - | 21 | 95 | 130 | 0 | 5 | - | - | 203 | - |
| 1 | 29 | 62 | - | - | 7.7 | - | - | - | - | - | 32 | 89 | 129 | 0 | 15 | 27 | .0 | 182 | - |
| 2 | 12 | 62 | .3 | - | 8.0 | - | - | - | - | - | 28 | 92 | 130 | 0 | 15 | - | - | 190 | - |
| 2 | 19 | 62 | .0 | - | 8.2 | - | - | - | - | - | 30 | 91 | 130 | 0 | 15 | 34 | - | 190 | - |
| 2 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *5 |
| 3 | 5 | 62 | .0 | - | 8.0 | - | - | - | - | - | 24 | 92 | 126 | 2 | 5 | - | - | 191 | *5 |
| 3 | 12 | 62 | - | - | 7.8 | - | - | - | - | - | 26 | 91 | 131 | 1 | 10 | - | - | 189 | *5 |
| 3 | 13 | 62 | - | - | - | - | 15 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 19 | 62 | .6 | - | 7.8 | - | - | - | - | - | 21 | 89 | 127 | 3 | 3 | - | - | 200 | *5 |
| 3 | 26 | 62 | 1.1 | - | 7.8 | - | - | - | - | - | 28 | 82 | 121 | 1 | 15 | - | - | 183 | *5 |
| 4 | 2 | 62 | 1.7 | - | 7.5 | - | - | - | - | - | 24 | 70 | 104 | 3 | 2 | 33 | - | 165 | *5 |
| 4 | 9 | 62 | 6.7 | - | 7.7 | - | - | - | - | .2 | 26 | 68 | 100 | 3 | 10 | 33 | .0 | 151 | 5 |
| 4 | 16 | 62 | 2.2 | - | 8.1 | - | - | - | - | - | 26 | 79 | 107 | - | 20 | 28 | .1 | 160 | - |
| 4 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *5 |
| 4 | 23 | 62 | 3.3 | - | 8.2 | - | - | - | - | - | 26 | 87 | 117 | - | 119 | - | - | 201 | - |
| 4 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 90 |
| 4 | 25 | 62 | - | - | - | - | 8 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 30 | 62 | 6.1 | - | 7.9 | - | - | - | - | - | 17 | 86 | 120 | - | - | 30 | .0 | 156 | 250 |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** CALIFORNIA
**MAJOR BASIN** CALIFORNIA
**MINOR BASIN** SAN JOAQUIN RIVER
**STATION LOCATION** SAN JOAQUIN RIVER NEAR VERNALIS, CALIFORNIA

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for* | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS |
| 6 | 29 | 62 | 32900 | 2150 | 420 | 3840 | * | 800 | 130 | 9200 | 5490 | 3250 | 3000 | 50 | 7 | 67 | 6 | 68 | 4 | 69 | 4 | 88 | 4 | 87 | 3 | 92 | 3 | 2 | 3 | 9 |
| 7 | 6 | 62 | 29100 | 1060 | 130 | 2530 | * | 970 | 210 | 8480 | 4580 | 2620 | 2950 | 50 | 7 | 71 | 5 | 68 | 5 | 88 | 4 | 51 | 3 | 38 | 3 | 92 | 2 | 3 | 2 | 69 |
| 7 | 13 | 62 | 13100 | 270 | 100 | 2550 | * | 1990 | 60 | 5770 | 910 | 930 | 330 | 67 | 5 | 51 | 4 | 50 | 4 | 68 | 4 | 25 | 2 | 38 | 2 | 34 | 2 | 69 | 2 | 24 |
| 8 | 8 | 62 | 16900 | 2280 | 40 | 1590 | 560 | 2090 | 950 | 6380 | 2980 | 1450 | 830 | 68 | 5 | 67 | 5 | 3 | 4 | 51 | 4 | 38 | 3 | 63 | 3 | 87 | 3 | 50 | 2 | 88 |
| 8 | 22 | 62 | 10400 | 360 | 0 | 3040 | 0 | 0 | 0 | 4900 | 2070 | 1140 | 1310 | 68 | 5 | 67 | 4 | 69 | 3 | 44 | 3 | 24 | 2 | 97 | 2 | 34 | 2 | 31 | 2 | 9 |
| 8 | 29 | 62 | 11100 | 120 | 0 | 1010 | * | 290 | 230 | 6130 | 2240 | 660 | 120 | 68 | 5 | 51 | 5 | 67 | 4 | 50 | 3 | 87 | 2 | 88 | 2 | 24 | 2 | 84 | 1 | 38 |
| 9 | 12 | 62 | 19200 | 250 | 250 | 1280 | * | 2820 | 330 | 10600 | 2400 | 1080 | 410 | 68 | 6 | 51 | 4 | 67 | 4 | 50 | 4 | 88 | 1 | 63 | 1 | 25 | 1 | 38 | 1 | 34 |
| *6 | 29 | 62 | | | | | 10880 | | | | | | | | | | | | | | | | | | | | | | | |
| *7 | 6 | 62 | | | | | 11100 | | | | | | | | | | | | | | | | | | | | | | | |
| *7 | 13 | 62 | | | | | 1430 | | | | | | | | | | | | | | | | | | | | | | | |
| *8 | 29 | 62 | | | | | 1030 | | | | | | | | | | | | | | | | | | | | | | | |
| *9 | 12 | 62 | | | | | 1240 | | | | | | | | | | | | | | | | | | | | | | | |

# PLANKTON POPULATION

**STATE** CALIFORNIA
**MAJOR BASIN** CALIFORNIA
**MINOR BASIN** SAN JOAQUIN RIVER
**STATION LOCATION** SAN JOAQUIN RIVER NEAR
VERNALIS, CALIFORNIA 122

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable)* *Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable)* *Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 6 | 29 | 62 | 20 | 32 | 48 | 21 | 26 | 16 | 20 | 8 | 23 | 80 | 0 | 11 | 2 | 1 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 6 | 62 | 80 | 44 | 26 | 32 | 71 | 4 | 92 | 2 | 18 | 0 | 0 | 6 | 2 | 1 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 7 | 13 | 62 | 20 | 40 | 26 | 21 | 20 | 18 | 71 | 4 | 17 | 0 | 0 | 69 | 2 | 4 | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 8 | 8 | 62 | 26 | 37 | 20 | 25 | 46 | 4 | 65 | 3 | 31 | 0 | 0 | 39 | 2 | 2 | 17 | 1 | 11 | 1 | | | | | 0 | | | | | | | 1 | 0 |
| 8 | 22 | 62 | 26 | 41 | 20 | 18 | 58 | 8 | 97 | 5 | 28 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 29 | 62 | 26 | 39 | 20 | 22 | 23 | 3 | 48 | 3 | 33 | 0 | 0 | 431 | 15 | 6 | 11 | 5 | 17 | 4 | 2 | 4 | 22 | 3 | 0 | | | | | | | 3 | 0 |
| 9 | 12 | 62 | 26 | 69 | 20 | 13 | 48 | 2 | 82 | 2 | 14 | 0 | 0 | 323 | 2 | 5 | 11 | 4 | 15 | 3 | 13 | 3 | 17 | 2 | 6 | 50 | 2 | | | | | 6 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** CALIFORNIA
**MAJOR BASIN** CALIFORNIA
**MINOR BASIN** SAN JOAQUIN RIVER
**STATION LOCATION** SAN JOAQUIN RIVER NEAR
VERNALIS, CALIFORNIA 122

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 6 | 29 | 62 | 8 | 6 | 1 | 1 | 5 | 5 | 6 | 5 | 38 | 12 | 23 | 14 | 61 | 18 | | | | | | |
| 7 | 6 | 62 | 8 | 15 | 0 | 2 | 5 | 4 | 5 | 4 | 4 | 24 | 7 | 27 | 11 | 36 | | | | | | |
| 7 | 18 | 62 | 8 | 2 | 0 | 1 | 3 | 3 | 3 | 3 | 11 | 22 | 35 | 26 | 46 | 34 | | | | | | |
| 7 | 25 | 62 | 8 | 21 | 1 | 2 | 6 | 4 | 7 | 4 | 7 | 21 | 24 | 24 | 31 | 32 | | | | | | |
| 8 | 1 | 62 | 8 | 17 | 0 | 2 | 14 | 6 | 14 | 6 | 3 | 26 | 23 | 23 | 26 | 35 | | | | | | |
| 8 | 8 | 62 | 8 | 29 | 1 | 1 | 2 | 3 | 3 | 3 | 0 | 36 | 1 | 15 | 1 | 39 | | | | | | |
| 8 | 15 | 62 | 10 | 13 | 0 | 2 | 3 | 4 | 3 | 4 | 6 | 12 | 25 | 16 | 31 | 20 | | | | | | |
| 8 | 22 | 62 | 10 | 5 | 0 | 2 | 3 | 4 | 3 | 4 | 27 | 28 | 60 | 33 | 87 | 43 | | | | | | |
| 8 | 29 | 62 | 9 | 20 | 0 | 1 | 7 | 4 | 7 | 4 | 6 | 13 | 17 | 17 | 23 | 21 | | | | | | |
| 9 | 5 | 62 | 9 | 25 | 1 | 1 | 5 | 3 | 6 | 3 | 0 | 10 | 15 | 15 | 15 | 18 | | | | | | |
| 9 | 19 | 62 | 11 | 27 | 0 | 1 | 4 | 3 | 4 | 3 | 11 | 12 | 21 | 16 | 32 | 20 | | | | | | |
| 9 | 26 | 62 | 10 | 23 | 0 | 1 | 11 | 4 | 11 | 4 | 25 | 11 | 12 | 15 | 37 | 19 | | | | | | |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 8 | 21 | 62 | 8 | 27 | 3678 | 183 | 49 | 134 | 1 | 13 | 18 | 2 | 1 | 14 | 1 | 6 | 3 | 1 | 7 |
| 8 | 29 | 62 | 9 | 11 | 4073 | 193 | 54 | 139 | 1 | 12 | 26 | 2 | 2 | 22 | 0 | 7 | 3 | 1 | 4 |

**STATION LOCATION** SAN JOAQUIN RIVER NEAR
VERNALIS, CALIFORNIA

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | |
| 6 | 29 | 62 | 23.3 | 8.8 | 7.4 | 3.0 | 14 | 1.8 | 5.8 | .0 | 99 | 115 | 146 | 10 | 25 | 47 | .2 | 346 |
| 7 | 13 | 62 | 23.9 | 8.9 | 7.6 | 4.4 | 15 | 3.5 | 8.9 | .0 | 182 | 174 | 236 | 10 | 50 | 85 | – | 628 |
| 7 | 18 | 62 | 27.2 | 10.9 | 8.0 | 5.5 | 18 | 5.0 | 8.8 | .0 | 183 | 173 | 228 | 10 | 45 | 73 | .1 | 598 |
| 7 | 25 | 62 | 23.9 | 8.5 | 7.8 | 6.0 | 20 | 2.9 | 5.9 | .0 | 206 | 175 | 214 | 15 | 60 | 70 | .8 | 630 |
| 8 | 1 | 62 | 23.3 | 8.5 | 7.8 | 5.1 | 19 | 3.6 | 9.9 | .0 | 210 | 174 | 243 | 10 | 35 | 76 | .3 | 676 |
| 8 | 8 | 62 | 23.3 | 8.6 | 8.1 | 4.8 | 17 | 4.5 | 7.7 | .0 | 184 | 173 | 221 | 15 | 35 | 72 | .0 | 616 |
| 8 | 15 | 62 | 23.9 | 6.9 | 7.4 | 3.0 | 17 | 3.6 | 9.8 | .0 | 181 | 164 | 222 | 10 | 40 | 65 | – | 616 |
| 8 | 22 | 62 | 23.9 | 7.1 | 7.3 | 4.5 | 19 | 3.6 | 8.8 | .0 | 182 | 172 | 229 | 10 | 40 | 72 | .3 | 563 |
| 8 | 29 | 62 | 22.8 | 7.1 | 7.6 | 4.6 | 25 | 3.8 | 9.7 | .0 | 182 | 176 | 214 | 10 | 45 | 69 | .3 | 545 |
| 9 | 5 | 62 | 20.0 | 7.0 | 7.3 | 3.6 | 10 | 5.0 | 12.0 | .2 | 169 | 163 | 201 | 10 | 40 | 70 | .1 | 563 |
| 9 | 12 | 62 | 21.7 | 7.1 | 6.8 | 3.7 | 11 | 3.7 | 8.0 | .0 | 159 | 170 | 202 | 10 | 10 | 65 | – | 478 |
| 9 | 19 | 62 | 20.6 | 7.8 | 8.0 | 3.7 | 8 | 3.0 | 8.8 | .0 | 170 | 172 | 200 | 10 | 10 | 66 | .2 | 579 |
| 9 | 26 | 62 | 20.6 | 7.0 | 7.5 | 3.8 | 15 | 4.5 | 8.8 | – | 154 | 169 | 196 | 0 | 40 | 61 | .0 | 512 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Vernalis, California
Operated by U.S. Geological Survey

MAJOR BASIN California

MINOR BASIN San Joaquin River

STATION LOCATION San Joaquin River near
Vernalis, California

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .335 | .504 | .714 | .619 | .808 | 6.390 | 3.540 | 2.000 | 1.440 | 1.600 | .650 | .792 |
| 2 | .378 | .510 | .734 | .616 | .792 | 5.730 | 3.410 | 1.760 | 1.550 | 1.450 | .642 | .900 |
| 3 | .324 | .520 | .759 | .616 | .780 | 5.160 | 3.120 | 1.690 | 3.570 | 1.280 | .634 | .990 |
| 4 | .304 | .514 | .766 | .612 | .770 | 5.040 | 2.700 | 1.660 | 4.490 | 1.180 | .642 | .965 |
| 5 | .300 | .584 | .800 | .608 | .756 | 5.020 | 2.380 | 1.700 | 5.060 | 1.070 | .679 | .890 |
| 6 | .291 | .636 | .832 | .612 | .748 | 5.000 | 2.250 | 2.010 | 5.490 | .984 | .778 | .920 |
| 7 | .318 | .633 | .836 | .619 | .752 | 5.690 | 2.150 | 2.540 | 4.660 | .953 | .764 | .950 |
| 8 | .356 | .616 | .832 | .626 | .756 | 7.220 | 2.070 | 2.940 | 3.540 | .935 | .760 | .995 |
| 9 | .382 | .633 | .812 | .633 | .831 | 8.620 | 1.990 | 3.170 | 3.650 | .917 | .756 | 1.080 |
| 10 | .386 | .633 | .800 | .692 | 1.090 | 9.650 | 1.930 | 4.240 | 4.350 | .904 | .751 | 1.110 |
| 11 | .382 | .647 | .792 | .748 | 2.000 | 9.830 | 1.840 | 5.090 | 4.440 | .890 | .746 | 1.080 |
| 12 | .382 | .608 | .766 | .800 | 3.550 | 8.780 | 1.780 | 5.460 | 4.920 | .878 | .733 | .995 |
| 13 | .386 | .570 | .742 | .820 | 4.670 | 7.890 | 1.760 | 5.130 | 5.300 | .866 | .746 | .925 |
| 14 | .386 | .517 | .728 | .828 | 4.760 | 7.340 | 1.730 | 4.530 | 5.040 | .854 | .728 | .885 |
| 15 | .523 | .517 | .717 | .820 | 5.780 | 6.980 | 1.510 | 4.050 | 4.530 | .842 | .582 | .920 |
| 16 | .475 | .507 | .703 | .812 | 7.820 | 6.780 | 1.420 | 3.290 | 3.910 | .830 | .562 | .930 |
| 17 | .434 | .507 | .682 | .800 | 10.200 | 6.620 | 1.280 | 2.560 | 3.400 | .818 | .598 | .920 |
| 18 | .393 | .485 | .668 | .776 | 11.100 | 6.120 | 1.220 | 2.210 | 3.080 | .806 | .622 | .895 |
| 19 | .399 | .494 | .664 | .770 | 11.600 | 5.820 | 1.570 | 1.970 | 2.410 | .794 | .618 | .880 |
| 20 | .414 | .556 | .668 | .900 | 12.000 | 5.610 | 1.800 | 1.850 | 2.640 | .746 | .658 | .905 |
| 21 | .418 | .594 | .661 | 1.030 | 12.500 | 5.170 | 2.050 | 1.930 | 3.290 | .710 | .642 | .980 |
| 22 | .459 | .616 | .650 | 1.170 | 12.200 | 4.940 | 2.340 | 1.910 | 3.510 | .726 | .642 | 1.040 |
| 23 | .478 | .626 | .650 | 1.260 | 11.400 | 4.870 | 2.280 | 2.000 | 3.530 | .730 | .614 | 1.060 |
| 24 | .475 | .630 | .647 | 1.160 | 10.600 | 4.740 | 2.060 | 2.050 | 3.530 | .627 | .650 | 1.140 |
| 25 | .466 | .650 | .647 | .972 | 10.000 | 4.550 | 1.990 | 2.030 | 3.170 | .599 | .706 | 1.140 |
| 26 | .450 | .678 | .640 | .896 | 8.970 | 4.420 | 1.960 | 2.120 | 2.690 | .574 | .778 | 1.100 |
| 27 | .453 | .700 | .633 | .856 | 7.690 | 4.330 | 2.010 | 2.200 | 2.320 | .557 | .841 | 1.060 |
| 28 | .469 | .700 | .630 | .836 | 6.850 | 4.230 | 2.100 | 2.020 | 2.000 | .566 | .764 | 1.090 |
| 29 | .494 | .700 | .630 | .812 |  | 3.970 | 2.140 | 1.880 | 1.780 | .614 | .787 | 1.120 |
| 30 | .498 | .706 | .626 | .800 |  | 3.790 | 2.170 | 1.690 | 1.620 | .630 | .733 | 1.140 |
| 31 | .494 |  | .626 | .812 |  | 3.610 |  | 1.570 |  | .606 | .706 |  |

# RADIOACTIVITY DETERMINATIONS

**STATION LOCATION** SAN JUAN RIVER AT
SHIPROCK, NEW MEXICO

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | |
| 10 | 2 | 61 | 10 | 14 | 7 | 5 | 6 | 3 | 13 | 6 | 15 | 11 | 16 | 11 | 31 | 16 | | | | | | |
| 10 | 9 | 61 | 11 | 11 | 7 | 5 | 10 | 4 | 17 | 6 | 69 | 11 | 60 | 9 | 129 | 14 | | | | | | |
| 10 | 16 | 61 | 11 | 11 | 9 | 8 | 6 | 3 | 15 | 9 | 35 | 16 | 17 | 11 | 52 | 19 | | | | | | |
| 10 | 23 | 61 | 11 | 14 | 6 | 4 | 5 | 3 | 11 | 5 | 16 | 12 | 14 | 11 | 30 | 16 | | | | | | |
| 10 | 30 | 61 | 11 | 7 | 4 | 3 | 10 | 4 | 14 | 5 | 58 | 16 | 77 | 15 | 135 | 22 | | | | | | |
| 11 | 6 | 61 | 11 | 21 | 15 | 10 | 8 | 4 | 23 | 11 | 141 | 20 | 68 | 13 | 209 | 24 | | | | | | |
| 11 | 13 | 61 | 11 | 28 | 1 | 2 | 18 | 6 | 19 | 6 | 17 | 13 | 51 | 16 | 68 | 21 | | | | | | |
| 12 | 18 | 61 | 1 | 2 | 2 | 2 | 17 | 6 | 19 | 6 | 7 | 10 | 44 | 13 | 51 | 16 | | | | | | |
| 12 | 26 | 61 | 1 | 10 | 0 | 2 | 9 | 5 | 9 | 5 | 3 | 16 | 33 | 20 | 36 | 26 | | | | | | |
| 1 | 2 | 62 | 1 | 12 | 1 | 2 | 4 | 3 | 5 | 4 | 10 | 17 | 19 | 19 | 29 | 25 | | | | | | |
| 1 | 10 | 62 | 1 | 22 | 0 | 2 | 7 | 4 | 7 | 4 | 28 | 17 | 41 | 20 | 69 | 26 | | | | | | |
| 1 | 15 | 62 | 1 | 29 | 0 | 3 | 20 | 8 | 20 | 8 | 8 | 17 | 44 | 22 | 52 | 27 | | | | | | |
| 1 | 22 | 62 | 2 | 6 | 0 | 1 | 4 | 4 | 4 | 4 | 3 | 14 | 36 | 20 | 39 | 24 | | | | | | |
| 1 | 29 | 62 | 2 | 14 | 0 | 2 | 22 | 7 | 22 | 7 | 41 | 17 | 54 | 21 | 95 | 27 | | | | | | |
| 2 | 5 | 62 | 2 | 16 | 1 | 2 | 14 | 6 | 15 | 6 | 20 | 10 | 26 | 13 | 46 | 16 | | | | | | |
| 2 | 14 | 62 | 2 | 27 | 26 | 20 | 10 | 5 | 36 | 21 | 195 | 29 | 59 | 13 | 254 | 32 | | | | | | |
| 2 | 20 | 62 | 3 | 8 | 50 | 26 | 8 | 4 | 58 | 26 | 314 | 37 | 38 | 12 | 352 | 39 | | | | | | |
| 2 | 26 | 62 | 3 | 9 | 5 | 4 | 18 | 6 | 23 | 7 | 99 | 16 | 50 | 13 | 149 | 21 | | | | | | |
| 3 | 5 | 62 | 3 | 15 | 1 | 2 | 12 | 6 | 13 | 6 | 10 | 13 | 23 | 16 | 33 | 21 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | 2 | 2 | 13 | 5 | 15 | 5 | 71 | 11 | 41 | 12 | 112 | 16 | | | | | | |
| 3 | 19 | 62 | 4 | 5 | 14 | 8 | 13 | 5 | 27 | 9 | 52 | 16 | 39 | 12 | 91 | 20 | | | | | | |
| 3 | 26 | 62 | 4 | 10 | 12 | 7 | 4 | 3 | 16 | 8 | 78 | 21 | 17 | 15 | 95 | 26 | | | | | | |
| 4 | 2 | 62 | 4 | 18 | 6 | 4 | 3 | 2 | 9 | 4 | 73 | 15 | 48 | 11 | 121 | 19 | | | | | | |
| 4 | 11 | 62 | 4 | 27 | 1 | 1 | 1 | 1 | 2 | 1 | 5 | 5 | 28 | 6 | 33 | 7 | | | | | | |
| 4 | 16 | 62 | 5 | 1 | 26 | 18 | 3 | 1 | 29 | 18 | 240 | 41 | 25 | 6 | 265 | 41 | | | | | | |
| 4 | 30 | 62 | 6 | 6 | 3 | 3 | 1 | 1 | 4 | 3 | 29 | 9 | 20 | 7 | 49 | 11 | | | | | | |
| 5 | 7 | 62 | 6 | 15 | 7 | 3 | 1 | 1 | 8 | 3 | 72 | 12 | 17 | 7 | 89 | 14 | | | | | | |
| 5 | 14 | 62 | 6 | 26 | 6 | 3 | 1 | 1 | 7 | 3 | 24 | 9 | 14 | 6 | 38 | 11 | | | | | | |
| 5 | 21 | 62 | 7 | 2 | 10 | 4 | 1 | 1 | 11 | 4 | 37 | 10 | 16 | 7 | 53 | 12 | | | | | | |
| 5 | 28 | 62 | 7 | 3 | 2 | 2 | 1 | 1 | 3 | 2 | 33 | 8 | 28 | 7 | 61 | 11 | | | | | | |
| 6 | 4 | 62 | 7 | 6 | 33 | 15 | 1 | 1 | 34 | 15 | 77 | 45 | 9 | 7 | 86 | 45 | | | | | | |
| 6 | 11 | 62 | 7 | 13 | 4 | 3 | 2 | 1 | 6 | 3 | 31 | 9 | 14 | 4 | 45 | 11 | | | | | | |
| 6 | 18 | 62 | 7 | 23 | 1 | 1 | 1 | 1 | 2 | 1 | 5 | 5 | 9 | 6 | 14 | 7 | | | | | | |
| 6 | 25 | 62 | 9 | 9 | 2 | 4 | 1 | 1 | 3 | 4 | 34 | 8 | 8 | 5 | 42 | 9 | | | | | | |
| 7 | 2 | 62 | 8 | 6 | 13 | 4 | 1 | 1 | 14 | 4 | 46 | 12 | 12 | 9 | 58 | 15 | | | | | | |
| 7 | 11 | 62 | 8 | 7 | 0 | 1 | 10 | 3 | 10 | 3 | 3 | 5 | 21 | 8 | 24 | 9 | | | | | | |
| 7 | 16 | 62 | 8 | 9 | 0 | 0 | 6 | 3 | 6 | 3 | 21 | 11 | 24 | 14 | 45 | 18 | | | | | | |
| 7 | 23 | 62 | 8 | 9 | 0 | 1 | 18 | 5 | 18 | 5 | 1 | 11 | 22 | 15 | 23 | 19 | | | | | | |
| 7 | 30 | 62 | 9 | 19 | 0 | 1 | 10 | 4 | 10 | 4 | 0 | 13 | 43 | 16 | 43 | 21 | | | | | | |
| 8 | 6 | 62 | 8 | 28 | 0 | 1 | 20 | 6 | 20 | 6 | 7 | 10 | 46 | 16 | 53 | 19 | | | | | | |
| 8 | 13 | 62 | 8 | 3 | 0 | 1 | 7 | 4 | 7 | 4 | 0 | 41 | 30 | 17 | 30 | 44 | | | | | | |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** COLORADO RIVER
**MINOR BASIN** SAN JUAN RIVER
**STATION LOCATION** SAN JUAN RIVER AT
SHIPROCK, NEW MEXICO 93

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 20 | 62 | 9 | 6 | 0 | 2 | 30 | 16 | 30 | 16 | 4 | 26 | 106 | 42 | 110 | 49 | | | | | | |
| 8 | 27 | 62 | 9 | 11 | 0 | 3 | 18 | 13 | 18 | 13 | 9 | 32 | 111 | 52 | 120 | 61 | | | | | | |
| 9 | 4 | 62 | 9 | 20 | 1 | 2 | 5 | 6 | 6 | 6 | 7 | 32 | 26 | 46 | 33 | 56 | | | | | | |
| 9 | 10 | 62 | 10 | 1 | 1 | 2 | 6 | 6 | 7 | 6 | 22 | 26 | 34 | 38 | 56 | 46 | | | | | | |
| 9 | 17 | 62 | 10 | 10 | 2 | 3 | 15 | 10 | 17 | 10 | 23 | 33 | 35 | 49 | 58 | 59 | | | | | | |
| 9 | 24 | 62 | 10 | 18 | 1 | 3 | 2 | 4 | 3 | 5 | 49 | 28 | 38 | 27 | 87 | 39 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

## ORGANIC CHEMICALS

**RECOVERED BY CARBON FILTER TECHNIQUE**

***RESULTS IN MICROGRAMS PER LITER***
*(Parts per billion)*

**STATE** NEW MEXICO

**MAJOR BASIN** COLORADO RIVER

**MINOR BASIN** SAN JUAN RIVER

**STATION LOCATION** SAN JUAN RIVER AT
SHIPROCK, NEW MEXICO

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 2 | 61 | 10 | 24 | 3455# | 96 | 18 | 78 | 0 | 2 | 11 | 3 | 1 | 7 | 0 | 2 | 1 | 1 | 1 |
| 11 | 6 | 61 | 11 | 27 | 7510 | 57 | 12 | 45 | 1 | 3 | 5 | 1 | 1 | 3 | 0 | 2 | 0 | 0 | 1 |
| 12 | 4 | 61 | 1 | 2 | 2484 | 157 | 34 | 123 | 1 | 4 | 19 | 3 | 2 | 14 | 0 | 4 | 1 | 1 | 4 |
| 1 | 2 | 62 | 1 | 15 | 2277 | 195 | 50 | 145 | 1 | 12 | 23 | 5 | 3 | 14 | 1 | 5 | 2 | 1 | 6 |
| 2 | 5 | 62 | 2 | 19 | 30 | * | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 9 | 62 | 3 | 19 | 3300 | 167 | 36 | 131 | 1 | 9 | 13 | 2 | 1 | 10 | 0 | 4 | 2 | 0 | 7 |
| 4 | 2 | 62 | 4 | 9 | 3410 | 228 | 69 | 159 | 4 | 21 | 21 | 1 | 1 | 17 | 2 | 7 | 6 | 1 | 9 |
| 5 | 7 | 62 | 5 | 16 | 2822 | 189 | 118 | 71 | 6 | 35 | 26 | 2 | 2 | 21 | 1 | 13 | 12 | 1 | 25 |
| 6 | 4 | 62 | 6 | 25 | 1625 | 197 | 75 | 122 | 2 | 22 | 19 | 2 | 2 | 14 | 1 | 8 | 6 | 2 | 16 |
| 7 | 2 | 62 | 7 | 11 | 3594 | 88 | 32 | 56 | 1 | 9 | 12 | 2 | 1 | 9 | 0 | 3 | 2 | 1 | 4 |
| 8 | 6 | 62 | 8 | 13 | 4432 | 106 | 39 | 67 | 1 | 11 | 14 | 1 | 1 | 12 | 0 | 5 | 3 | 1 | 4 |
| 9 | 4 | 62 | 9 | 10 | 3397 | 227 | 50 | 177 | 1 | 16 | 19 | 1 | 1 | 17 | 0 | 5 | 3 | 1 | 5 |

# ESTIMATED

* LOW FLOW - NOT PROCESSED

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** NEW MEXICO
**MAJOR BASIN** COLORADO RIVER
**MINOR BASIN** SAN JUAN RIVER
**STATION LOCATION** SAN JUAN RIVER AT
SHIPROCK, NEW MEXICO 93

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 3 | 61 | 13.0 | 9.0 | 7.8 | 1.1 | - | - | - | .1 | 21 | 100 | 202 | 8 | 625 | 140 | - | 400 | - |
| 10 | 4 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 560 |
| 10 | 11 | 61 | 13.0 | 8.3 | 8.0 | 1.5 | - | - | - | 1.9 | 33 | 128 | 272 | 6 | 650 | 220 | - | 570 | 640 |
| 10 | 16 | 61 | - | - | - | - | 7 | - | - | - | - | - | - | - | - | - | - | - | - |
| 10 | 17 | 61 | 16.0 | 8.1 | 8.2 | 1.2 | - | - | - | .1 | 24 | 104 | 186 | 3 | 1250 | 370 | - | - | 170000 |
| 10 | 23 | 61 | 10.0 | 9.0 | 8.2 | 1.3 | - | - | - | .0 | 22 | 106 | 206 | 4 | 320 | 190 | - | 390 | - |
| 10 | 25 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 14000 |
| 10 | 30 | 61 | 6.0 | 9.4 | 8.1 | 1.6 | - | - | - | .1 | 27 | 108 | 214 | 7 | 210 | 206 | - | 360 | 11000 |
| 11 | 7 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 30000 |
| 11 | 8 | 61 | 5.0 | 11.2 | 8.2 | 2.9 | - | - | - | .2 | 32 | 130 | 230 | - | 2150 | 248 | - | 500 | - |
| 11 | 14 | 61 | 5.0 | 9.3 | 8.2 | 2.3 | 8 | - | - | .1 | 31 | 122 | 250 | 5 | 287 | 250 | - | 500 | 15000 |
| 11 | 20 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 18000 |
| 11 | 22 | 61 | 2.0 | 10.2 | 8.3 | 1.5 | - | - | - | .1 | 29 | | 244 | 4 | 117 | 220 | - | 560 | - |
| 11 | 27 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1900 |
| 11 | 28 | 61 | 5.0 | 10.3 | 8.2 | 2.0 | - | - | - | .0 | 28 | 112 | 228 | 1 | 4 | 165 | .5 | - | - |
| 12 | 5 | 61 | 6.0 | 12.0 | 8.1 | 1.3 | - | - | - | - | 34 | 118 | 230 | 3 | 56 | 190 | .4 | - | *100 |
| 12 | 13 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *100 |
| 12 | 19 | 61 | .0 | 9.3 | 8.3 | .7 | - | - | - | .2 | 40 | 144 | 292 | - | 80 | - | - | 720 | 26000 |
| 12 | 26 | 61 | .0 | 11.8 | 7.9 | 2.4 | - | - | - | .0 | 42 | 160 | 342 | - | 18 | 340 | - | 700 | - |
| 1 | 2 | 62 | .0 | 7.2 | 8.1 | .8 | - | - | - | .2 | 40 | 156 | 322 | - | 24 | 300 | - | 720 | - |
| 1 | 8 | 62 | - | - | - | - | 18 | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 9 | 62 | - | - | 8.2 | 2.9 | - | - | - | 1.7 | 40 | 150 | 320 | 1 | 18 | 220 | - | 620 | 100 |
| 1 | 15 | 62 | .0 | 9.5 | 8.1 | .4 | - | - | - | .3 | 48 | 154 | 368 | - | 30 | 275 | - | 780 | - |
| 1 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 700 |
| 1 | 23 | 62 | .0 | 11.3 | 8.1 | 2.0 | - | - | - | 1.8 | 43 | 140 | 328 | - | 42 | 255 | - | 820 | 2300 |
| 1 | 31 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 80 |
| 2 | 1 | 62 | .0 | 8.1 | 8.0 | 2.4 | - | - | - | .2 | - | 142 | 362 | - | 12 | 250 | - | - | - |
| 2 | 6 | 62 | 1.0 | 10.0 | 7.8 | 2.1 | - | - | - | .2 | 39 | 134 | 320 | 3 | 53 | 340 | - | 652 | 2800 |
| 2 | 13 | 62 | 8.0 | - | 8.0 | - | - | - | - | .0 | 43 | 122 | 234 | - | 2800 | 235 | - | 660 | - |
| 2 | 20 | 62 | 3.0 | 8.9 | 7.9 | 3.4 | - | - | - | .1 | 37 | 126 | 292 | - | 2380 | - | - | - | - |
| 2 | 26 | 62 | 3.0 | 9.1 | 8.2 | 1.7 | - | - | - | .1 | 43 | 144 | 316 | 2 | 900 | 270 | - | 604 | 51000 |
| 3 | 5 | 62 | 2.0 | 9.0 | 8.1 | 2.8 | - | - | - | .1 | 41 | 130 | 294 | - | 575 | 225 | - | 600 | 100 |
| 3 | 12 | 62 | 3.0 | 9.2 | 8.1 | 2.7 | 16 | - | - | .2 | 42 | 120 | 286 | - | 320 | 244 | - | 544 | 100 |
| 3 | 19 | 62 | 10.0 | 7.5 | 8.7 | 4.1 | 5 | - | - | - | 42 | 120 | 272 | - | 430 | 212 | - | 540 | 37000 |
| 3 | 26 | 62 | 11.0 | 9.6 | 8.1 | 3.8 | - | - | - | .1 | 35 | 110 | 250 | 3 | 2800 | 135 | 1.1 | 480 | 59000 |
| 4 | 3 | 62 | 11.0 | 9.0 | 8.2 | 3.0 | - | - | - | .1 | 30 | 98 | 190 | - | 1250 | 140 | .9 | 460 | - |
| 4 | 9 | 62 | 15.0 | 8.4 | 7.8 | 3.6 | - | - | - | .1 | 15 | 90 | 154 | - | 57 | 107 | - | 340 | 4400 |
| 4 | 16 | 62 | 17.0 | 7.8 | 8.0 | 7.0 | - | - | - | .1 | 12 | 78 | 118 | - | 4875 | - | .9 | 332 | 18000 |
| 4 | 23 | 62 | 10.0 | 7.9 | 7.8 | 2.6 | - | - | - | .1 | 17 | 66 | 112 | - | 800 | - | - | - | - |

MINOR BASIN SAN JUAN RIVER

STATION LOCATION SAN JUAN RIVER AT

SHIPROCK, NEW MEXICO 93

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 4 | 30 | 62 | 10.0 | 9.2 | 7.9 | 2.8 | - | - | - | .0 | 9 | 64 | 114 | - | 276 | 42 | - | 224 | 2600 |
| 5 | 8 | 62 | 14.0 | 5.4 | 7.9 | - | - | - | - | - | 17 | 74 | 108 | - | 1500 | 54 | - | 176 | - |
| 5 | 14 | 62 | 12.0 | 7.0 | 8.0 | .4 | - | - | - | .1 | 11 | 62 | 74 | 2 | 285 | 37 | - | 152 | - |
| 5 | 21 | 62 | 23.0 | - | 7.9 | - | - | - | - | .1 | 16 | 78 | 120 | - | 238 | 78 | - | 272 | - |
| 5 | 28 | 62 | 12.0 | 9.0 | 8.1 | 3.3 | - | - | - | .1 | 12 | 80 | 114 | - | 174 | 68 | .8 | 224 | - |
| 6 | 11 | 62 | 17.0 | 5.8 | 8.1 | .8 | 17 | - | - | .4 | 10 | 60 | 102 | - | 153 | 42 | .6 | 170 | 1100 |
| 6 | 19 | 62 | 20.0 | 7.9 | 8.0 | .9 | - | - | - | .1 | 10 | 70 | 114 | - | 87 | 62 | .5 | 184 | - |
| 6 | 25 | 62 | 18.0 | 7.7 | 8.2 | - | - | - | - | .3 | 10 | 60 | 116 | - | - | 32 | .4 | 144 | 100 |
| 7 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1000 |
| 7 | 3 | 62 | 20.0 | 6.0 | 8.4 | .3 | - | - | - | .1 | 19 | 66 | 132 | 2 | 165 | 88 | .4 | 246 | - |
| 7 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 7 | 10 | 62 | 21.0 | - | 8.4 | - | - | - | - | .1 | 20 | 78 | 72 | 2 | 23 | 130 | - | 390 | - |
| 7 | 11 | 62 | - | - | - | - | 10 | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 18000 |
| 7 | 23 | 62 | 24.0 | 8.7 | 8.5 | .2 | 0 | - | - | .1 | 34 | 104 | 248 | - | 16 | 180 | - | 590 | 13000 |
| 7 | 30 | 62 | 21.0 | 6.6 | 8.5 | 2.0 | - | - | - | .0 | 35 | 120 | 262 | - | 10 | 135 | - | - | - |
| 8 | 7 | 62 | 21.0 | 7.6 | 8.4 | .8 | - | - | - | .1 | 42 | 134 | 290 | 2 | 17 | 212 | - | 660 | - |
| 8 | 13 | 62 | 24.0 | 7.3 | 8.6 | - | - | - | - | .1 | 35 | 135 | 306 | - | 22 | 272 | - | 780 | 100 |
| 8 | 20 | 62 | 24.0 | 10.5 | 8.4 | - | - | - | - | .2 | 106 | 180 | 640 | - | 5 | 580 | - | 1660 | 3200 |
| 8 | 28 | 62 | 25.0 | 8.1 | 8.4 | - | - | - | - | .1 | 97 | 154 | 630 | - | - | 550 | - | 1680 | - |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 400 |
| 9 | 5 | 62 | 20.0 | 8.7 | 8.4 | 3.9 | - | - | - | - | 68 | 168 | 496 | - | - | 370 | - | 1210 | - |
| 9 | 10 | 62 | - | - | - | - | 21 | - | - | - | - | - | - | - | - | - | - | - | 16000 |
| 9 | 11 | 62 | 14.0 | 9.5 | 8.2 | 4.3 | - | - | - | .1 | 73 | 168 | 500 | - | 10 | 320 | - | 1100 | - |
| 9 | 18 | 62 | 26.0 | 10.8 | 8.5 | .0 | - | - | - | .2 | 83 | 150 | 568 | - | - | 380 | - | 1420 | 1200 |
| 9 | 24 | 62 | 20.0 | 7.0 | 8.1 | 4.9 | - | - | - | .0 | 60 | 166 | 352 | - | 260 | 260 | - | 840 | - |

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Shiprock, New Mexico
Operated by U.S. Geological Survey

MINOR BASIN San Juan River

STATION LOCATION San Juan River at Shiprock, New Mexico

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.380 | 1.620 | .934 | .520 | .600 | .680 | 2.230 | 6.030 | 3.180 | 2.710 | .695 | .062 |
| 2 | 1.160 | 1.640 | .923 | .500 | .600 | .666 | 2.110 | 5.050 | 3.280 | 2.520 | .575 | .088 |
| 3 | 1.000 | 1.590 | .901 | .500 | .600 | .755 | 2.370 | 4.690 | 3.790 | 2.290 | .652 | .128 |
| 4 | .923 | 1.260 | .890 | .500 | .650 | .811 | 2.920 | 4.660 | 4.460 | 2.040 | .527 | .109 |
| 5 | .879 | 1.070 | .890 | .520 | .700 | .795 | 3.320 | 5.290 | 4.720 | 1.960 | .457 | .052 |
| 6 | .835 | 1.010 | .879 | .540 | .800 | .803 | 3.500 | 6.360 | 5.510 | 1.880 | .494 | .132 |
| 7 | .795 | 1.030 | .699 | .570 | .950 | .811 | 3.720 | 6.980 | 5.950 | 1.760 | .445 | .180 |
| 8 | .745 | .989 | .663 | .600 | 1.100 | .878 | 3.740 | 8.120 | 6.250 | 1.770 | .433 | .188 |
| 9 | 1.020 | 1.030 | .637 | .580 | 1.600 | .938 | 3.640 | 8.410 | 5.730 | 1.710 | .388 | .159 |
| 10 | 3.270 | 1.000 | .600 | .560 | 2.400 | .956 | 3.520 | 9.000 | 5.880 | 1.630 | .335 | .155 |
| 11 | 3.630 | 1.000 | .550 | .530 | 2.500 | .920 | 3.360 | 9.330 | 6.320 | 1.540 | .335 | .125 |
| 12 | 2.180 | .956 | .450 | .530 | 2.240 | .835 | 3.080 | 9.250 | 6.400 | 1.430 | .310 | .132 |
| 13 | 1.560 | .989 | .400 | .550 | 2.020 | .787 | 3.030 | 9.250 | 6.660 | 1.500 | .315 | .118 |
| 14 | 1.450 | 1.000 | .500 | .560 | 2.110 | .779 | 3.450 | 8.490 | 6.810 | 1.400 | .325 | .143 |
| 15 | 1.460 | .868 | .600 | .560 | 2.160 | .779 | 4.790 | 7.320 | 6.660 | 1.240 | .292 | .143 |
| 16 | 1.510 | .805 | .700 | .530 | 1.930 | .771 | 5.730 | 5.770 | 5.920 | 1.150 | .292 | .139 |
| 17 | 1.400 | .956 | .650 | .540 | 1.930 | .771 | 6.980 | 4.760 | 4.890 | 1.060 | .234 | .135 |
| 18 | 1.420 | 1.010 | .650 | .550 | 1.690 | .878 | 7.490 | 4.230 | 4.050 | .974 | .135 | .115 |
| 19 | 1.480 | 1.080 | .650 | .580 | 1.320 | 1.050 | 8.280 | 3.630 | 3.450 | .903 | .102 | .135 |
| 20 | 1.460 | 1.070 | .630 | .600 | 1.160 | 1.220 | 9.000 | 3.420 | 3.990 | .860 | .074 | .155 |
| 21 | 1.350 | 1.030 | .630 | .600 | 1.090 | 1.420 | 9.460 | 3.450 | 5.050 | .878 | .072 | .579 |
| 22 | 1.320 | 1.030 | .650 | .600 | 1.040 | 1.500 | 9.380 | 3.930 | 5.290 | .903 | .069 | .469 |
| 23 | 1.260 | 1.000 | .650 | .600 | .938 | 1.310 | 7.860 | 3.790 | 5.080 | .912 | .105 | .457 |
| 24 | 1.280 | .934 | .620 | .550 | .894 | 1.290 | 6.730 | 3.470 | 5.020 | .894 | .224 | .763 |
| 25 | 1.190 | .945 | .600 | .550 | .844 | 1.210 | 7.020 | 3.760 | 4.790 | .929 | .188 | .819 |
| 26 | 1.090 | .978 | .580 | .550 | .886 | 1.290 | 7.700 | 4.230 | 4.560 | .912 | .112 | 1.240 |
| 27 | 1.070 | 1.040 | .550 | .550 | .811 | 1.520 | 7.820 | 4.020 | 4.290 | .852 | .094 | 1.030 |
| 28 | 1.070 | .978 | .550 | .550 | .725 | 1.850 | 7.490 | 4.360 | 3.600 | .740 | .082 | .929 |
| 29 | 1.040 | .956 | .530 | .550 |  | 2.360 | 7.020 | 4.050 | 2.630 | .666 | .074 | 1.000 |
| 30 | 1.040 | .956 | .530 | .600 |  | 2.780 | 6.730 | 3.600 | 2.330 | .596 | .069 | .878 |
| 31 | 1.310 |  | .530 | .600 |  | 2.650 |  | 3.300 |  | .645 | .064 |  |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 15 | 4 | 19 | 6 | | | | | | |
| 10 | 9 | 61 | 10 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 21 | 4 | 25 | 6 | | | | | | |
| 10 | 16 | 61 | 10 | 25 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 4 | 219 | 8 | 225 | 9 | | | | | | |
| 10 | 23 | 61 | 11 | 1 | - | - | - | - | - | - | 7 | 5 | 10 | 8 | 17 | 9 | | | | | | |
| 10 | 30 | 61 | 11 | 9 | - | - | - | - | - | - | 4 | 5 | 44 | 6 | 48 | 8 | | | | | | |
| 10 | 31 | 61 | 11 | 10 | - | - | - | - | - | - | 6 | 5 | 27 | 6 | 33 | 9 | | | | | | |
| 11 | 6 | 61 | 11 | 16 | 1 | 1 | 0 | 1 | 1 | 1 | 6 | 5 | 28 | 6 | 34 | 8 | | | | | | |
| 11 | 13 | 61 | 11 | 24 | - | - | - | - | - | - | 3 | 5 | 10 | 5 | 13 | 7 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | - | - | - | - | - | - | 4 | 5 | 18 | 5 | 22 | 7 | | | | | | |
| 11 | 27 | 61 | 12 | 5 | - | - | - | - | - | - | 4 | 5 | 19 | 5 | 23 | 7 | | | | | | |
| 12 | 4 | 61 | 12 | 14 | 0 | 1 | 0 | 2 | 0 | 2 | 4 | 10 | 50 | 14 | 54 | 17 | | | | | | |
| 12 | 11 | 61 | 12 | 19 | - | - | - | - | - | - | 4 | 6 | 25 | 5 | 29 | 8 | | | | | | |
| 12 | 18 | 61 | 12 | 28 | - | - | - | - | - | - | 17 | 7 | 21 | 6 | 38 | 9 | | | | | | |
| 12 | 26 | 61 | 1 | 3 | - | - | - | - | - | - | 2 | 5 | 8 | 5 | 10 | 7 | | | | | | |
| 1 | 2 | 62 | 1 | 10 | 1 | 1 | 0 | 0 | 1 | 1 | 12 | 4 | 17 | 4 | 29 | 6 | | | | | | |
| 1 | 8 | 62 | 1 | 17 | - | - | - | - | - | - | 16 | 5 | 16 | 5 | 32 | 7 | | | | | | |
| 1 | 15 | 62 | 1 | 24 | - | - | - | - | - | - | 21 | 6 | 34 | 5 | 55 | 8 | | | | | | |
| 1 | 22 | 62 | 1 | 31 | - | - | - | - | - | - | 21 | 5 | 17 | 5 | 38 | 7 | | | | | | |
| 1 | 26 | 62 | 2 | 8 | - | - | - | - | - | - | 31 | 5 | 41 | 4 | 72 | 6 | | | | | | |
| 2 | 5 | 62 | 2 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 4 | 22 | 4 | 45 | 6 | | | | | | |
| 2 | 12 | 62 | 2 | 23 | - | - | - | - | - | - | 17 | 6 | 32 | 7 | 49 | 9 | | | | | | |
| 2 | 19 | 62 | 3 | 2 | - | - | - | - | - | - | 23 | 5 | 61 | 6 | 84 | 8 | | | | | | |
| 2 | 26 | 62 | 3 | 9 | - | - | - | - | - | - | 22 | 5 | 41 | 6 | 63 | 8 | | | | | | |
| 3 | 5 | 62 | 3 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 5 | 40 | 4 | 66 | 6 | | | | | | |
| 3 | 12 | 62 | 4 | 3 | - | - | - | - | - | - | 41 | 6 | 78 | 6 | 119 | 8 | | | | | | |
| 3 | 19 | 62 | 3 | 30 | - | - | - | - | - | - | 35 | 5 | 51 | 5 | 86 | 7 | | | | | | |
| 3 | 26 | 62 | 4 | 4 | - | - | - | - | - | - | 31 | 4 | 35 | 4 | 66 | 6 | | | | | | |
| 4 | 2 | 62 | 4 | 13 | 0 | 1 | 0 | 1 | 0 | 1 | 21 | 4 | 28 | 4 | 49 | 5 | | | | | | |
| 4 | 9 | 62 | 4 | 26 | - | - | - | - | - | - | 12 | 5 | 26 | 5 | 38 | 7 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 15 | 5 | 28 | 5 | 43 | 7 | | | | | | |
| 4 | 23 | 62 | 5 | 23 | - | - | - | - | - | - | 6 | 6 | 19 | 6 | 25 | 8 | | | | | | |
| 4 | 30 | 62 | 6 | 4 | - | - | - | - | - | - | 10 | 6 | 21 | 6 | 31 | 8 | | | | | | |
| 5 | 14 | 62 | 6 | 20 | 0 | 1 | 0 | 0 | 0 | 1 | 14 | 6 | 16 | 5 | 30 | 8 | | | | | | |
| 5 | 21 | 62 | 6 | 27 | - | - | - | - | - | - | 11 | 5 | 20 | 5 | 31 | 7 | | | | | | |
| 5 | 28 | 62 | 6 | 27 | - | - | - | - | - | - | 1 | 5 | 19 | 5 | 20 | 7 | | | | | | |
| 6 | 5 | 62 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 5 | 19 | 5 | 26 | 7 | | | | | | |
| 6 | 11 | 62 | 7 | 10 | - | - | - | - | - | - | 26 | 6 | 65 | 6 | 91 | 8 | | | | | | |
| 6 | 18 | 62 | 7 | 31 | - | - | - | - | - | - | 10 | 4 | 19 | 4 | 29 | 6 | | | | | | |
| 6 | 25 | 62 | 7 | 20 | - | - | - | - | - | - | 24 | 3 | 56 | 4 | 80 | 5 | | | | | | |
| 7 | 2 | 62 | 8 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 30 | 6 | 32 | 8 | | | | | | |
| 7 | 9 | 62 | 8 | 10 | - | - | - | - | - | - | 21 | 3 | 26 | 3 | 47 | 4 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | | | | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 7 | 16 | 62 | 8 | 3 | - | - | - | - | - | - | 6 | 4 | 20 | 4 | 26 | 6 | | | | | | | | | |
| 7 | 23 | 62 | 8 | 7 | - | - | - | - | - | - | 19 | 6 | 49 | 6 | 68 | 8 | | | | | | | | | |
| 7 | 30 | 62 | 8 | 22 | - | - | - | - | - | - | 1 | 6 | 15 | 6 | 16 | 8 | | | | | | | | | |
| 8 | 6 | 62 | 8 | 23 | 0 | 1 | 0 | 0 | 0 | 1 | 7 | 6 | 18 | 6 | 25 | 8 | | | | | | | | | |
| 8 | 13 | 62 | 8 | 29 | - | - | - | - | - | - | 5 | 5 | 22 | 6 | 27 | 7 | | | | | | | | | |
| 8 | 20 | 62 | 9 | 5 | - | - | - | - | - | - | 9 | 10 | 231 | 9 | 240 | 13 | | | | | | | | | |
| 8 | 27 | 62 | 10 | 6 | - | - | - | - | - | - | 3 | 10 | 80 | 11 | 83 | 15 | | | | | | | | | |
| 9 | 17 | 62 | 10 | 8 | 1 | 1 | 0 | 0 | 1 | 1 | 6 | 5 | 24 | 5 | 30 | 7 | | | | | | | | | |
| 9 | 24 | 62 | 10 | 18 | - | - | - | - | - | - | 4 | 5 | 15 | 6 | 19 | 7 | | | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** GEORGIA

**MAJOR BASIN** SOUTHEAST

**MINOR BASIN** SAVANNAH RIVER

**STATION LOCATION** SAVANNAH RIVER AT
PORT WENTWORTH, GEORGIA 47

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10T | |
| MONTH | DAY | YEAR | TOTAL | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 200 | 0 | 0 | 60 | 0 | 60 | 0 | 20 | 60 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 300 | 0 | 0 | 40 | 0 | 40 | 0 | 170 | 20 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 400 | 0 | 20 | 20 | 0 | 20 | 0 | 80 | 290 | 20 | 80 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 200 | 0 | 0 | 20 | 0 | 0 | 0 | 190 | 40 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 200 | 0 | 20 | 20 | 0 | 50 | 0 | 90 | 50 | 0 | 50 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 400 | 0 | 20 | 0 | 0 | 90 | 0 | 110 | 180 | 50 | 110 | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 0 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 1 | 22 | 62 | 100 | 0 | 0 | 20 | 0 | 20 | 0 | 50 | 50 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 2 | 6 | 62 | 400 | 0 | 0 | 0 | 0 | 40 | 20 | 250 | 80 | 0 | 100 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 1100 | 0 | 0 | 110 | 0 | 320 | 20 | 270 | 380 | 0 | 160 | 51 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 200 | 0 | 20 | 0 | 20 | 40 | 0 | 20 | 60 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 700 | 0 | 0 | 20 | 50 | 90 | 0 | 270 | 250 | 20 | 200 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 1300 | 0 | 0 | 60 | 0 | 290 | 150 | 330 | 460 | 20 | 150 | 51 | 1 | 69 | 1 | 88 | 1 | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 400 | 0 | 0 | 20 | 0 | 20 | 120 | 100 | 100 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 900 | 0 | 0 | 40 | 20 | 250 | 100 | 330 | 150 | 40 | 20 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 3100 | 100 | 20 | 600 | 0 | 290 | 120 | 1200 | 910 | 170 | 210 | 71 | 2 | 25 | 2 | 67 | 2 | 88 | 2 | 68 | 1 | 51 | 1 | 87 | 1 | 69 | 1 | | | | |
| 6 | 5 | 62 | 1100 | 0 | 0 | 90 | 0 | 700 | 0 | 270 | 50 | 70 | 70 | 57 | 3 | 69 | 1 | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 800 | 0 | 0 | 60 | 0 | 80 | 40 | 310 | 290 | 0 | 150 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 1400 | 0 | 170 | 190 | 0 | 0 | 0 | 250 | 800 | 170 | 340 | 17 | 1 | 69 | 1 | 88 | 1 | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 900 | 0 | 0 | 210 | 0 | 170 | 0 | 370 | 150 | 0 | 80 | 69 | 2 | 51 | 1 | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 2700 | 0 | 380 | 480 | 0 | 60 | 0 | 720 | 1010 | 680 | 760 | 16 | 2 | 69 | 2 | 88 | 1 | 73 | 1 | 71 | 1 | 68 | 1 | | | | | | | | |
| 8 | 20 | 62 | 5400 | 0 | 0 | 510 | 0 | 0 | 0 | 2360 | 2530 | 1350 | 1980 | 69 | 4 | 88 | 3 | 67 | 2 | 68 | 2 | 87 | 1 | 73 | 1 | 86 | 1 | 97 | 1 | 25 | 1 | | |
| 9 | 4 | 62 | 3300 | 40 | 0 | 130 | 0 | 0 | 0 | 1270 | 1860 | 420 | 630 | 88 | 2 | 87 | 2 | 69 | 2 | 67 | 2 | 68 | 1 | | | | | | | | | | |
| 9 | 17 | 62 | 100 | 10 | 0 | 10 | 0 | 10 | 0 | 60 | 30 | 90 | 110 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA *(Identifiable) Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 56 | 15 | 57 | 14 | 22 | 12 | 58 | 8 | 51 | 390 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 57 | 18 | 65 | 11 | 22 | 7 | 19 | 4 | 60 | 8860 | 0 | 2 | | | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 57 | 22 | 22 | 8 | 65 | 5 | 56 | 5 | 60 | 2170 | 0 | 4 | | | | | | | | | | | 1 | | | | | | | 1 | 1 |
| 11 | 20 | 61 | 57 | 23 | 56 | 7 | 58 | 5 | 22 | 5 | 60 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 57 | 27 | 56 | 10 | 71 | 10 | 72 | 10 | 43 | 0 | 0 | 6 | 46 | 1 | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 12 | 18 | 61 | 56 | 17 | 57 | 13 | 58 | 9 | 86 | 6 | 55 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 57 | 30 | 56 | 10 | 43 | 7 | 58 | 5 | 48 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 1 | 22 | 62 | 57 | 29 | 56 | 18 | 71 | 7 | 65 | 4 | 42 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 6 | 62 | 57 | 11 | 19 | 10 | 56 | 10 | 43 | 7 | 62 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 2 | 19 | 62 | 56 | 14 | 57 | 11 | 71 | 8 | 29 | 5 | 62 | 90 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 3 | 5 | 62 | 19 | 12 | 57 | 11 | 43 | 9 | 71 | 9 | 59 | 0 | 0 | 1 | | | | | | | | | | | 2 | | | | | | | 2 | 1 |
| 3 | 19 | 62 | 43 | 21 | 71 | 8 | 19 | 6 | 56 | 6 | 59 | 90 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 4 | 2 | 62 | 57 | 25 | 56 | 9 | 10 | 8 | 71 | 6 | 52 | 60 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 1 |
| 4 | 16 | 62 | 57 | 19 | 92 | 17 | 43 | 15 | 56 | 13 | 36 | 0 | 10 | 4 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 5 | 7 | 62 | 57 | 39 | 56 | 21 | 43 | 5 | 92 | 3 | 32 | 0 | 0 | 0 | | | | | | | | | | | 4 | 51 | 1 | | | | | 0 | 0 |
| 5 | 21 | 62 | 57 | 30 | 56 | 28 | 71 | 7 | 58 | 4 | 31 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 5 | 62 | 56 | 27 | 18 | 11 | 58 | 8 | 29 | 5 | 49 | 0 | 0 | 1 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 56 | 30 | 58 | 12 | 57 | 7 | 92 | 3 | 48 | 40 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 56 | 16 | 19 | 8 | 88 | 6 | 43 | 5 | 65 | 40 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 56 | 53 | 57 | 19 | 58 | 8 | 97 | 2 | 18 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 56 | 32 | 58 | 14 | 57 | 12 | 2 | 8 | 34 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 56 | 28 | 20 | 10 | 46 | 5 | 57 | 4 | 53 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 9 | 4 | 62 | 56 | 26 | 57 | 16 | 65 | 7 | 58 | 4 | 47 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 56 | 31 | 57 | 8 | 18 | 7 | 65 | 5 | 49 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*

*(Parts per billion)*

**MAJOR BASIN** SOUTHEAST

**MINOR BASIN** SAVANNAH RIVER

**STATION LOCATION** SAVANNAH RIVER AT
PORT WENTWORTH, GEORGIA 4

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 4 | 61 | 10 | 20 | 3330 | 239 | 81 | 158 | 2 | 18 | 20 | 2 | 2 | 15 | 1 | 15 | 8 | 2 | 16 |
| 11 | 13 | 61 | 11 | 22 | 3230 | 209 | 100 | 109 | 8 | 25 | 20 | 2 | 2 | 15 | 1 | 14 | 8 | 3 | 22 |
| 12 | 11 | 61 | 3 | 23 | 3070 | * | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 7 | 62 | 5 | 22 | 3870 | 307 | 159 | 148 | 10 | 43 | 32 | 3 | 2 | 24 | 3 | 17 | 19 | 2 | 36 |
| 7 | 2 | 62 | 7 | 9 | 5180 | 126 | 61 | 65 | 1 | 17 | 14 | 1 | 1 | 11 | 1 | 7 | 6 | 1 | 15 |
| 8 | 6 | 62 | 8 | 12 | 4610 | 176 | 78 | 98 | 2 | 23 | 16 | 1 | 1 | 13 | 1 | 10 | 6 | 1 | 20 |

* NOT PROCESSED - FLOW DATA INACCURATE

**MINOR BASIN** SAVANNAH RIVER

**STATION LOCATION** SAVANNAH RIVER AT

PORT WENTWORTH, GEORGIA 47

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3800 |
| 10 | 9 | 61 | - | - | - | - | 41 | - | - | - | - | - | - | - | - | - | - | - | 10000 |
| 10 | 16 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 1700 |
| 10 | 19 | 61 | 19.7 | 7.9 | 7.0 | 1.0 | - | - | - | - | 4 | 19 | 17 | 15 | 28 | 2 | - | 46 | - |
| 10 | 23 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 11000 |
| 10 | 30 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 650 |
| 11 | 6 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .1 | - | 18000 |
| 11 | 13 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 880 |
| 11 | 15 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .1 | - | - |
| 11 | 16 | 61 | 18.9 | 8.0 | 7.2 | 1.0 | - | - | - | - | 7 | 21 | 17 | 10 | 26 | 2 | - | 49 | - |
| 11 | 20 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 8800 |
| 11 | 21 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 85 | - |
| 11 | 27 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 48 | 1800 |
| 12 | 4 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4000 |
| 12 | 11 | 61 | - | - | - | - | 51 | - | - | - | - | - | - | - | - | - | - | 48 | 710 |
| 12 | 18 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 51 | 15000 |
| 12 | 19 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 4 | .1 | - | - |
| 12 | 21 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 27 | - |
| 12 | 26 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 12 | 28 | 61 | 12.8 | 8.5 | 6.8 | 1.1 | - | - | - | - | 4 | - | - | - | - | - | - | - | - |
| 1 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 24 | 2500 |
| 1 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 1 | 15 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2600 |
| 1 | 29 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 14000 |
| 2 | 1 | 62 | 11.4 | 8.8 | 6.5 | 1.1 | - | - | - | - | 7 | 15 | 14 | 35 | 44 | 4 | - | 55 | - |
| 2 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3000 |
| 2 | 15 | 62 | 12.0 | 9.2 | 7.0 | 1.6 | - | - | - | - | 6 | 17 | 15 | 20 | 26 | 5 | - | 51 | - |
| 2 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3000 |
| 2 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5100 |
| 2 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2100 |
| 3 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4400 |
| 3 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 350 |
| 3 | 15 | 62 | 12.8 | 8.0 | 6.9 | .9 | - | - | - | - | 4 | 14 | 12 | 35 | 36 | 3 | - | 49 | - |
| 3 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1600 |
| 3 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 530 |
| 4 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5000 |
| 4 | 12 | 62 | 22.8 | 7.1 | 7.0 | 1.4 | - | - | - | - | 7 | 16 | 14 | 50 | 25 | 3 | - | 39 | - |
| 4 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 90 |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 7800 |

| DATE OF SAMPLE MONTH | DATE OF SAMPLE DAY | DATE OF SAMPLE YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 7 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3700 |
| 5 | 17 | 62 | 23.6 | 7.3 | 6.7 | 2.1 | - | - | - | - | 5 | 17 | 18 | 25 | 24 | 5 | - | 49 | - |
| 5 | 28 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3500 |
| 6 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4700 |
| 6 | 11 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4100 |
| 6 | 14 | 62 | 25.0 | 7.3 | 6.9 | 1.0 | - | - | - | - | 7 | 15 | 18 | 30 | 22 | 5 | - | 52 | - |
| 6 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *10 |
| 6 | 25 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | 74 | 180 |
| 7 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4000 |
| 7 | 9 | 62 | - | - | - | - | 20 | - | - | - | - | - | - | - | - | - | .0 | - | 21000 |
| 7 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 4000 |
| 7 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2000 |
| 7 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1100 |
| 8 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3900 |
| 8 | 10 | 62 | 27.2 | 6.8 | 6.4 | 1.3 | - | - | - | - | 9 | 16 | 15 | 10 | 32 | 4 | - | 48 | - |
| 8 | 13 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5000 |
| 8 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 3400 |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | 5 | 22 | 24 | - | - | 5 | .0 | 74 | 7400 |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | 1500 |
| 9 | 20 | 62 | 25.0 | 6.6 | 6.7 | 2.1 | - | - | - | - | 2 | 16 | 15 | 10 | 30 | 3 | - | 40 | - |
| 9 | 24 | 62 | - | - | - | - | - | - | - | - | 16 | - | - | 10 | - | 42 | .0 | - | 9800 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Clyo, Georgia
Operated by U.S. Geological Survey

STATE Georgia

MAJOR BASIN Southeast

MINOR BASIN Savannah River

STATION LOCATION Savannah River at
Port Wentworth, Georgia

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 7.160 | 6.660 | 7.060 | 24.200 | 13.100 | 16.600 | 17.400 | 19.100 | 7.600 | 7.600 | 7.060 | 7.160 |
| 2 | 6.960 | 6.660 | 7.270 | 23.700 | 13.700 | 18.400 | 17.100 | 19.100 | 7.600 | 7.380 | 7.380 | 7.060 |
| 3 | 6.960 | 6.660 | 7.380 | 23.200 | 14.300 | 20.900 | 17.400 | 18.800 | 7.820 | 7.160 | 7.380 | 7.060 |
| 4 | 6.860 | 6.760 | 7.270 | 22.800 | 14.900 | 23.700 | 17.400 | 18.400 | 7.930 | 6.960 | 7.270 | 6.960 |
| 5 | 6.860 | 7.060 | 6.960 | 22.400 | 15.500 | 25.700 | 17.100 | 17.800 | 7.930 | 6.960 | 7.380 | 6.960 |
| 6 | 6.760 | 6.860 | 6.860 | 22.400 | 16.600 | 26.200 | 17.100 | 17.100 | 7.820 | 6.860 | 7.490 | 6.960 |
| 7 | 6.560 | 6.760 | 6.860 | 22.000 | 17.100 | 26.700 | 17.100 | 16.400 | 7.820 | 6.760 | 7.380 | 7.060 |
| 8 | 6.360 | 6.660 | 6.960 | 21.600 | 17.100 | 26.200 | 17.400 | 15.700 | 7.820 | 6.860 | 7.270 | 7.060 |
| 9 | 6.260 | 6.760 | 7.060 | 21.200 | 15.900 | 24.700 | 17.800 | 14.300 | 8.260 | 7.270 | 7.380 | 7.060 |
| 10 | 6.260 | 6.760 | 7.160 | 20.900 | 14.300 | 22.400 | 18.400 | 12.700 | 8.980 | 7.270 | 7.270 | 6.960 |
| 11 | 6.360 | 6.760 | 7.380 | 20.900 | 12.500 | 20.600 | 19.100 | 12.000 | 9.620 | 7.160 | 7.060 | 6.860 |
| 12 | 6.360 | 6.760 | 7.270 | 20.900 | 11.100 | 19.100 | 20.000 | 11.900 | 9.760 | 7.060 | 6.960 | 6.860 |
| 13 | 6.360 | 6.760 | 7.380 | 21.200 | 9.620 | 17.800 | 20.300 | 12.200 | 9.620 | 7.060 | 6.960 | 6.860 |
| 14 | 6.460 | 6.760 | 7.710 | 21.600 | 8.740 | 17.100 | 20.300 | 12.500 | 10.300 | 7.160 | 6.760 | 6.960 |
| 15 | 6.760 | 6.760 | 9.340 | 22.800 | 8.500 | 16.800 | 20.300 | 12.900 | 11.400 | 7.490 | 6.760 | 7.160 |
| 16 | 6.660 | 6.660 | 11.200 | 24.700 | 8.500 | 17.100 | 20.600 | 12.000 | 12.200 | 7.930 | 6.760 | 7.380 |
| 17 | 6.360 | 6.660 | 12.500 | 26.700 | 8.860 | 17.800 | 21.200 | 10.600 | 12.500 | 7.710 | 6.960 | 7.490 |
| 18 | 6.260 | 6.860 | 13.500 | 27.700 | 8.740 | 18.800 | 22.000 | 9.620 | 13.300 | 7.380 | 7.160 | 7.380 |
| 19 | 6.160 | 7.380 | 14.100 | 28.200 | 8.620 | 20.000 | 22.400 | 8.980 | 13.900 | 7.160 | 7.600 | 7.380 |
| 20 | 6.160 | 7.270 | 15.300 | 26.700 | 8.740 | 21.200 | 23.200 | 8.860 | 14.500 | 7.060 | 7.600 | 7.380 |
| 21 | 6.160 | 6.960 | 15.900 | 25.200 | 9.100 | 22.800 | 23.200 | 8.740 | 13.500 | 7.160 | 7.490 | 7.380 |
| 22 | 6.460 | 6.960 | 16.400 | 22.800 | 9.480 | 24.700 | 23.200 | 8.380 | 12.700 | 7.490 | 7.270 | 7.270 |
| 23 | 6.560 | 6.960 | 17.100 | 21.600 | 9.760 | 25.200 | 22.800 | 8.150 | 12.200 | 7.710 | 7.270 | 7.160 |
| 24 | 6.360 | 6.960 | 17.600 | 20.600 | 11.100 | 24.200 | 22.000 | 8.040 | 11.900 | 7.490 | 7.380 | 7.270 |
| 25 | 6.460 | 7.060 | 18.100 | 20.000 | 12.300 | 22.800 | 21.600 | 7.930 | 11.200 | 7.160 | 7.600 | 7.160 |
| 26 | 6.460 | 7.270 | 18.600 | 18.800 | 13.500 | 21.600 | 21.200 | 8.040 | 9.900 | 7.060 | 8.040 | 7.160 |
| 27 | 6.460 | 7.490 | 19.100 | 17.600 | 14.500 | 20.900 | 20.900 | 7.820 | 8.500 | 7.060 | 8.040 | 7.490 |
| 28 | 6.660 | 7.600 | 19.700 | 15.900 | 15.500 | 20.000 | 20.300 | 7.710 | 7.930 | 7.380 | 7.820 | 7.930 |
| 29 | 6.960 | 7.380 | 20.900 | 13.900 |  | 19.100 | 20.000 | 7.710 | 7.710 | 7.380 | 7.490 | 8.620 |
| 30 | 7.060 | 7.160 | 22.400 | 12.700 |  | 18.400 | 19.700 | 7.710 | 7.600 | 7.270 | 7.380 | 9.340 |
| 31 | 6.860 |  | 23.700 | 12.500 |  | 17.600 |  | 7.710 |  | 7.060 | 7.270 |  |

| DATE OF SAMPLE | | | TOTAL | ALGAE *(Number per milliliter)* | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 100 | 0 | 0 | 40 | 0 | 0 | 0 | 60 | 0 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 11 | 7 | 61 | 300 | 0 | 20 | 0 | 20 | 40 | 0 | 80 | 100 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 600 | 0 | 0 | 90 | 0 | 140 | 0 | 230 | 160 | 0 | 50 | | | | | | | | | | | | | | | | | | | | |
| 12 | 19 | 61 | 600 | 0 | 0 | 0 | 0 | 90 | 0 | 410 | 140 | 50 | 20 | 68 | 2 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 1000 | 20 | 50 | 160 | 0 | 140 | 20 | 320 | 270 | 0 | 20 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 160 | 0 | 0 | 50 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 500 | 0 | 0 | 20 | 0 | 0 | 0 | 230 | 200 | 50 | 0 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 700 | 0 | 0 | 20 | 0 | 340 | 0 | 290 | 20 | 20 | 50 | 51 | 1 | 69 | 1 | | | | | | | | | | | | | | | | |
| 3 | 6 | 62 | 800 | 0 | 0 | 0 | 0 | 380 | 0 | 340 | 70 | 90 | 20 | 57 | 2 | 71 | 2 | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 1300 | 0 | 0 | 40 | 0 | 0 | 0 | 990 | 290 | 120 | 60 | 69 | 3 | | | | | | | | | | | | | | | | | | |
| 4 | 5 | 62 | 400 | 0 | 0 | 20 | 0 | 20 | 0 | 80 | 230 | 60 | 40 | | | | | | | | | | | | | | | | | | | | |
| 4 | 17 | 62 | 1100 | 20 | 0 | 0 | 20 | 0 | 610 | 340 | 110 | 140 | 90 | 65 | 2 | 69 | 1 | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 800 | 60 | 0 | 100 | 0 | 0 | 0 | 440 | 230 | 0 | 0 | 68 | 2 | | | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 800 | 20 | 40 | 150 | 20 | 0 | 40 | 420 | 130 | 230 | 210 | 68 | 1 | 69 | 1 | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 200 | 0 | 0 | 0 | 0 | 60 | 0 | 100 | 20 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | 130 | | | | | | | | | | | | | | | | | | | | |
| 7 | 23 | 62 | 200 | 0 | 0 | 40 | 0 | 0 | 0 | 0 | 120 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 2 | 62 | 100 | 40 | 0 | 40 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 400 | 0 | 0 | 40 | 0 | 120 | 0 | 80 | 120 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 300 | 0 | 0 | 0 | 0 | 120 | 40 | 40 | 80 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 100 | 0 | 10 | 20 | 0 | 10 | 10 | 0 | 30 | 20 | 20 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 57 | 36 | 56 | 9 | 28 | 9 | 58 | 8 | 38 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 7 | 61 | 56 | 26 | 65 | 20 | 58 | 16 | 57 | 15 | 23 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 11 | 20 | 61 | 56 | 33 | 57 | 14 | 58 | 11 | 65 | 10 | 32 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 56 | 32 | 58 | 19 | 57 | 18 | 28 | 7 | 24 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 19 | 61 | 56 | 29 | 57 | 16 | 58 | 14 | 65 | 6 | 35 | 50 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 57 | 34 | 58 | 13 | 27 | 11 | 65 | 5 | 37 | 140 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 56 | 32 | 57 | 29 | 62 | 5 | 58 | 4 | 30 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 57 | 37 | 56 | 27 | 43 | 5 | 28 | 3 | 28 | 70 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 57 | 44 | 56 | 26 | 82 | 10 | 2 | 4 | 16 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 6 | 62 | 57 | 42 | 97 | 21 | 56 | 17 | 92 | 3 | 17 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 57 | 45 | 56 | 39 | 28 | 2 | 95 | 2 | 12 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 5 | 62 | 57 | 35 | 56 | 34 | 43 | 6 | 92 | 5 | 20 | 0 | 0 | 6 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 4 | 17 | 62 | 57 | 39 | 56 | 20 | 62 | 5 | 92 | 5 | 31 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 57 | 35 | 56 | 30 | 28 | 5 | 90 | 3 | 27 | 20 | 0 | 7 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 57 | 37 | 56 | 21 | 58 | 21 | 28 | 3 | 18 | 0 | 0 | 4 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 57 | 35 | 56 | 20 | 58 | 4 | 43 | 4 | 37 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 7 | 2 | 62 | 56 | 35 | 57 | 32 | 2 | 4 | 31 | 2 | 27 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 23 | 62 | 56 | 30 | 57 | 18 | 65 | 7 | 2 | 5 | 40 | 0 | 0 | 34 | 11 | 2 | | | | | | | | | 5 | 51 | 1 | | | | | 4 | 0 |
| 8 | 2 | 62 | 56 | 41 | 57 | 21 | 65 | 4 | 2 | 4 | 30 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 56 | 34 | 57 | 15 | 2 | 8 | 65 | 7 | 34 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 56 | 40 | 64 | 15 | 2 | 9 | 57 | 5 | 31 | 0 | 0 | 9 | 15 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 65 | 30 | 56 | 24 | 2 | 9 | 57 | 8 | 29 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

RADIOACTIVITY DETERMINATIONS

SAVANNAH RIVER

**STATION LOCATION** SAVANNAH RIVER AT
NORTH AUGUSTA, SOUTH CAROLINA 48

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 16 | - | - | - | - | - | - | 4 | 5 | 5 | 5 | 9 | 7 | | | | | | |
| 10 | 9 | 61 | 10 | 20 | - | - | - | - | - | - | 4 | 5 | 7 | 5 | 11 | 7 | | | | | | |
| 10 | 16 | 61 | 10 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 10 | | | | | | |
| 10 | 23 | 61 | 11 | 1 | - | - | - | - | - | - | 2 | 5 | 6 | 5 | 8 | 7 | | | | | | |
| 10 | 31 | 61 | 11 | 13 | - | - | - | - | - | - | 0 | 5 | 11 | 6 | 11 | 8 | | | | | | |
| 11 | 7 | 61 | 11 | 21 | - | - | - | - | - | - | 0 | 5 | 5 | 5 | 5 | 7 | | | | | | |
| 11 | 13 | 61 | 11 | 24 | - | - | - | - | - | - | 7 | 5 | 2 | 5 | 9 | 7 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 5 | 4 | 8 | 6 | | | | | | |
| 11 | 27 | 61 | 12 | 5 | - | - | - | - | - | - | 2 | 5 | 6 | 5 | 8 | 7 | | | | | | |
| 12 | 19 | 61 | 12 | 28 | 0 | 1 | 0 | 0 | 0 | 1 | 15 | 4 | 12 | 4 | 27 | 6 | | | | | | |
| 12 | 26 | 61 | 1 | 5 | - | - | - | - | - | - | 5 | 6 | 7 | 5 | 12 | 8 | | | | | | |
| 1 | 2 | 62 | 1 | 15 | - | - | - | - | - | - | 14 | 5 | 12 | 4 | 26 | 7 | | | | | | |
| 1 | 8 | 62 | 1 | 22 | - | - | - | - | - | - | 35 | 9 | 79 | 6 | 114 | 11 | | | | | | |
| 1 | 15 | 62 | 1 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 6 | 7 | 5 | 24 | 8 | | | | | | |
| 1 | 23 | 62 | 1 | 31 | - | - | - | - | - | - | 56 | 10 | 25 | 7 | 81 | 12 | | | | | | |
| 1 | 30 | 62 | 2 | 13 | - | - | - | - | - | - | 70 | 8 | 66 | 6 | 136 | 10 | | | | | | |
| 2 | 5 | 62 | 2 | 15 | - | - | - | - | - | - | 17 | 5 | 10 | 5 | 27 | 7 | | | | | | |
| 2 | 26 | 62 | 3 | 21 | 0 | 1 | 0 | 0 | 0 | 1 | 43 | 10 | 16 | 4 | 59 | 11 | | | | | | |
| 3 | 6 | 62 | 3 | 16 | - | - | - | - | - | - | 19 | 6 | 8 | 5 | 27 | 8 | | | | | | |
| 3 | 13 | 62 | 3 | 26 | - | - | - | - | - | - | 166 | 11 | 160 | 7 | 326 | 13 | | | | | | |
| 3 | 19 | 62 | 4 | 2 | 1 | 1 | 0 | 0 | 1 | 1 | 26 | 5 | 15 | 4 | 41 | 6 | | | | | | |
| 3 | 26 | 62 | 4 | 9 | - | - | - | - | - | - | 30 | 5 | 18 | 4 | 48 | 6 | | | | | | |
| 4 | 2 | 62 | 4 | 13 | - | - | - | - | - | - | 39 | 7 | 72 | 8 | 111 | 11 | | | | | | |
| 4 | 9 | 62 | 4 | 20 | - | - | - | - | - | - | 167 | 16 | 74 | 6 | 241 | 17 | | | | | | |
| 4 | 17 | 62 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 25 | 5 | 17 | 5 | 42 | 7 | | | | | | |
| 4 | 24 | 62 | 5 | 23 | - | - | - | - | - | - | 22 | 7 | 15 | 7 | 37 | 10 | | | | | | |
| 5 | 7 | 62 | 6 | 20 | - | - | - | - | - | - | 21 | 7 | 25 | 7 | 46 | 10 | | | | | | |
| 5 | 14 | 62 | 6 | 25 | - | - | - | - | - | - | 26 | 7 | 18 | 6 | 44 | 9 | | | | | | |
| 5 | 21 | 62 | 6 | 27 | 0 | 1 | 0 | 0 | 0 | 1 | 18 | 6 | 12 | 6 | 30 | 8 | | | | | | |
| 6 | 11 | 62 | 7 | 10 | - | - | - | - | - | - | 11 | 11 | 18 | 5 | 29 | 12 | | | | | | |
| 6 | 18 | 62 | 8 | 13 | 1 | 1 | 2 | 2 | 3 | 2 | 46 | 4 | 68 | 6 | 114 | 7 | | | | | | |
| 6 | 25 | 62 | 7 | 26 | - | - | - | - | - | - | 10 | 6 | 6 | 5 | 16 | 7 | | | | | | |
| 7 | 2 | 62 | 7 | 31 | - | - | - | - | - | - | 6 | 6 | 4 | 5 | 10 | 7 | | | | | | |
| 7 | 23 | 62 | 8 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 5 | 11 | 5 | 22 | 7 | | | | | | |
| 8 | 20 | 62 | 9 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 5 | 5 | 5 | 11 | 7 | | | | | | |
| 9 | 4 | 62 | 9 | 27 | - | - | - | - | - | - | 0 | 9 | 22 | 7 | 22 | 11 | | | | | | |
| 9 | 10 | 62 | 10 | 2 | - | - | - | - | - | - | 7 | 6 | 4 | 6 | 11 | 8 | | | | | | |
| 9 | 17 | 62 | 10 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 6 | 11 | 5 | 24 | 7 | | | | | | |
| 9 | 24 | 62 | 10 | 19 | - | - | - | - | - | - | 0 | 4 | 7 | 4 | 7 | 6 | | | | | | |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 10 | 61 | 10 | 16 | 3857 | 179 | 59 | 120 | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 13 | 61 | 11 | 19 | 3813 | 219 | 71 | 148 | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 13 | 61 | | * | 7670 | 198 | 64 | 134 | 6 | 17 | 21 | 2 | 2 | 16 | 1 | 6 | 5 | 1 | 8 |
| 1 | 2 | 62 | 1 | 14 | 2674 | 350 | 149 | 201 | 3 | 40 | 31 | 2 | 1 | 27 | 1 | 15 | 15 | 3 | 42 |
| 2 | 5 | 62 | 2 | 14 | 2395 | 242 | 63 | 179 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 9 | 62 | 3 | 19 | 1835 | 518 | 159 | 359 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 9 | 62 | | * | 4230 | 354 | 102 | 252 | 9 | 28 | 23 | 2 | 2 | 17 | 2 | 10 | 8 | 1 | 23 |
| 4 | 6 | 62 | 4 | 16 | 3244 | 293 | 122 | 171 | 9 | 37 | 22 | 3 | 2 | 14 | 3 | 11 | 13 | 1 | 29 |
| 5 | 4 | 62 | 5 | 17 | 3455 | 226 | 132 | 94 | 5 | 40 | 28 | 4 | 1 | 20 | 3 | 12 | 18 | 1 | 28 |
| 7 | 1 | 62 | 7 | 14 | 6528 | 154 | 94 | 60 | 3 | 29 | 16 | 1 | 1 | 14 | 0 | 13 | 12 | 1 | 20 |
| 8 | 6 | 62 | 8 | 13 | 6737 | 119 | 58 | 61 | 2 | 16 | 12 | 1 | 1 | 10 | 0 | 5 | 6 | 1 | 16 |

**MINOR BASIN** SAVANNAH RIVER

**STATION LOCATION** SAVANNAH RIVER AT

NORTH AUGUSTA, SOUTH CAROLINA 48

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 22.9 | - | 7.5 | - | - | - | - | - | 3 | 28 | 22 | - | 5 | - | - | - | - |
| 10 | 9 | 61 | 21.0 | - | 7.5 | - | - | - | - | - | 3 | 30 | 18 | - | 12 | - | - | - | - |
| 10 | 10 | 61 | - | - | - | - | 11 | - | - | - | - | - | - | - | - | - | - | - | - |
| 10 | 16 | 61 | 12.5 | - | 7.3 | - | - | - | - | - | 3 | 24 | 22 | - | 8 | - | - | - | - |
| 10 | 23 | 61 | 12.9 | - | 7.3 | - | - | - | - | - | 3 | 26 | 20 | - | 5 | - | - | - | - |
| 10 | 30 | 61 | 18.9 | - | 7.3 | - | - | - | - | - | 3 | 28 | 22 | 5 | 5 | 3 | .0 | 34 | - |
| 11 | 7 | 61 | 20.1 | - | 7.3 | - | - | - | - | - | 3 | 20 | 26 | 5 | 8 | 3 | .0 | 45 | - |
| 11 | 13 | 61 | 19.0 | - | 7.6 | - | 11 | - | - | - | 3 | 26 | 24 | - | 8 | 3 | .0 | 42 | - |
| 11 | 20 | 61 | 15.5 | - | 7.6 | - | - | - | - | - | 3 | 28 | 28 | - | 8 | 6 | .0 | - | - |
| 11 | 27 | 61 | 14.9 | - | 7.4 | - | - | - | - | - | 3 | 26 | 16 | - | 10 | 5 | .1 | - | - |
| 12 | 4 | 61 | 14.9 | - | 7.4 | - | - | - | - | - | 3 | 24 | 20 | - | 10 | - | - | - | - |
| 12 | 12 | 61 | 15.5 | - | 7.3 | - | - | - | - | - | 3 | 28 | 28 | - | 10 | - | - | - | - |
| 12 | 19 | 61 | 14.3 | - | 7.1 | - | - | - | - | - | 3 | 26 | 20 | - | 20 | - | - | - | - |
| 12 | 26 | 61 | 11.5 | - | 7.3 | - | - | - | - | - | 3 | 26 | 26 | 5 | 20 | 9 | .1 | - | - |
| 1 | 2 | 62 | 8.8 | - | 7.4 | - | - | - | - | - | 4 | 28 | 34 | 5 | 25 | 9 | - | 50 | - |
| 1 | 8 | 62 | - | - | - | - | 38 | - | - | - | - | 10 | - | - | - | 6 | .1 | - | - |
| 1 | 15 | 62 | 8.9 | - | 6.9 | - | - | - | - | - | 2 | 24 | 32 | - | 25 | 15 | - | - | - |
| 1 | 23 | 62 | 9.5 | - | 6.7 | - | - | - | - | - | 3 | 14 | 22 | - | 35 | 6 | .1 | - | - |
| 1 | 30 | 62 | 9.9 | 9.4 | 7.0 | - | - | - | - | - | 4 | 26 | 24 | - | 60 | 15 | - | - | - |
| 2 | 5 | 62 | 11.9 | - | 7.3 | - | - | - | - | - | 3 | 22 | 40 | - | 20 | 15 | .0 | - | - |
| 2 | 12 | 62 | 11.0 | - | 7.3 | - | - | - | - | - | 4 | 22 | 38 | - | 15 | - | - | - | 4500 |
| 2 | 14 | 62 | - | - | - | - | 15 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 19 | 62 | 10.5 | 11.5 | 7.1 | - | - | - | - | - | 4 | 24 | 30 | - | 15 | - | - | - | - |
| 2 | 26 | 62 | 11.8 | 11.0 | 7.1 | - | - | - | - | - | 3 | 22 | 28 | - | 50 | - | - | - | 1000 |
| 3 | 6 | 62 | 8.9 | - | 7.4 | - | - | - | - | - | 3 | 20 | 28 | - | 20 | - | - | - | - |
| 3 | 19 | 62 | 12.5 | 11.8 | 7.4 | - | - | - | - | - | 3 | 18 | 20 | - | 20 | - | - | - | - |
| 3 | 26 | 62 | 13.5 | - | 7.2 | - | - | - | - | - | 3 | 24 | 26 | - | 20 | - | - | - | - |
| 4 | 2 | 62 | 14.9 | - | 7.2 | - | - | - | - | - | 5 | 26 | 24 | 40 | 50 | 3 | - | - | - |
| 4 | 9 | 62 | 15.8 | 9.7 | 7.1 | - | 23 | - | - | - | 4 | 24 | 22 | 40 | 50 | 11 | .1 | - | 20000 |
| 4 | 17 | 62 | 13.9 | - | 7.2 | - | - | - | - | - | 4 | 24 | 22 | 25 | 25 | 17 | .0 | - | 600 |
| 4 | 24 | 62 | 15.0 | - | 7.3 | - | - | - | - | - | 4 | 22 | 32 | 5 | 25 | 56 | .0 | - | - |
| 4 | 30 | 62 | 19.5 | - | 7.4 | - | - | - | - | - | 4 | 28 | 36 | - | 20 | - | - | - | - |
| 5 | 7 | 62 | 19.9 | - | 7.7 | - | - | - | - | - | 4 | 26 | 20 | 15 | 20 | 8 | .0 | - | 200 |
| 5 | 14 | 62 | 18.5 | - | 7.2 | - | - | - | - | - | 5 | 22 | 14 | - | 25 | - | - | - | *200 |
| 5 | 21 | 62 | 19.2 | - | 7.1 | - | - | - | - | - | 3 | 24 | 14 | 20 | 25 | 7 | .0 | - | - |
| 6 | 11 | 62 | 20.0 | - | 7.2 | - | - | - | - | - | 3 | 16 | 12 | 10 | 25 | 13 | .0 | - | - |
| 6 | 18 | 62 | 21.9 | - | 7.2 | - | - | - | - | - | 4 | 16 | 12 | - | 20 | - | - | - | - |
| 6 | 25 | 62 | 20.0 | - | 7.1 | - | - | - | - | - | 5 | 15 | 14 | - | 20 | - | - | - | 20 |
| 7 | 2 | 62 | 19.9 | - | 7.1 | - | - | - | - | - | 4 | 16 | 18 | - | 15 | - | - | - | - |

NATIONAL WATER QUALITY NETWORK

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** SOUTH CAROLINA
**MAJOR BASIN** SOUTHEAST
**MINOR BASIN** SAVANNAH RIVER
**STATION LOCATION** SAVANNAH RIVER AT
NORTH AUGUSTA, SOUTH CAROLINA 48

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 14 | 62 | - | - | - | - | 7 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 12 | 62 | - | - | - | - | 12 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 10 | 62 | 23.0 | - | 7.4 | - | - | - | - | - | 7 | 14 | 12 | 10 | 5 | 5 | .0 | - | - |
| 9 | 17 | 62 | 21.9 | - | 7.1 | - | - | - | - | - | 3 | 16 | 14 | - | 5 | - | - | - | - |
| 9 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | 1 | - | 48 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Augusta, Georgia
Operated by U.S. Geological Survey

STATE South Carolina

MAJOR BASIN Southeast

MINOR BASIN Savannah River

STATION LOCATION Savannah River at
North Augusta, South Carolina

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5.790 | 5.570 | 5.790 | 11.700 | 15.200 | 21.900 | 8.240 | 12.000 | 6.120 | 5.350 | 5.570 | 5.790 |
| 2 | 5.790 | 6.010 | 4.930 | 15.200 | 14.600 | 22.500 | 12.100 | 12.000 | 6.340 | 5.350 | 5.900 | 5.790 |
| 3 | 5.680 | 6.120 | 4.930 | 17.300 | 10.600 | 17.500 | 15.200 | 12.400 | 6.010 | 5.240 | 6.450 | 5.680 |
| 4 | 5.570 | 5.240 | 4.930 | 16.900 | 5.600 | 7.250 | 17.700 | 11.400 | 6.010 | 5.240 | 6.120 | 5.900 |
| 5 | 5.570 | 5.460 | 5.030 | 16.600 | 5.380 | 5.600 | 20.700 | 10.100 | 6.010 | 5.240 | 5.790 | 5.900 |
| 6 | 5.570 | 5.350 | 5.130 | 14.100 | 6.150 | 7.470 | 17.700 | 7.330 | 6.230 | 5.680 | 5.790 | 5.900 |
| 7 | 5.570 | 5.680 | 5.130 | 20.400 | 7.250 | 8.460 | 13.700 | 7.330 | 7.220 | 5.790 | 5.790 | 5.790 |
| 8 | 5.460 | 5.680 | 5.680 | 26.900 | 7.140 | 7.910 | 7.800 | 9.870 | 8.210 | 5.460 | 5.790 | 5.680 |
| 9 | 5.460 | 5.570 | 5.460 | 26.600 | 6.590 | 8.350 | 14.200 | 9.630 | 8.670 | 5.350 | 6.010 | 5.570 |
| 10 | 5.460 | 5.680 | 5.130 | 21.300 | 5.380 | 5.930 | 16.400 | 10.100 | 7.440 | 5.350 | 6.230 | 5.680 |
| 11 | 5.570 | 5.790 | 5.030 | 25.700 | 5.160 | 6.040 | 13.800 | 12.800 | 8.100 | 5.350 | 6.120 | 5.680 |
| 12 | 6.010 | 5.570 | 5.430 | 27.900 | 4.960 | 14.900 | 15.800 | 11.200 | 12.900 | 5.680 | 5.790 | 5.900 |
| 13 | 6.340 | 5.350 | 11.300 | 21.400 | 4.960 | 22.500 | 24.700 | 6.890 | 13.900 | 6.670 | 5.790 | 6.340 |
| 14 | 5.790 | 5.350 | 13.900 | 14.100 | 6.040 | 25.700 | 22.500 | 7.000 | 17.400 | 6.450 | 5.790 | 6.670 |
| 15 | 5.570 | 5.460 | 15.100 | 11.100 | 6.480 | 23.400 | 16.800 | 7.110 | 16.600 | 5.680 | 5.790 | 6.230 |
| 16 | 5.570 | 6.450 | 15.500 | 14.100 | 4.960 | 21.900 | 13.900 | 6.120 | 12.800 | 5.460 | 6.230 | 5.900 |
| 17 | 5.460 | 6.340 | 15.300 | 16.300 | 4.760 | 19.500 | 17.600 | 6.450 | 6.560 | 5.350 | 6.450 | 6.120 |
| 18 | 5.460 | 5.240 | 12.100 | 16.400 | 4.860 | 12.500 | 17.700 | 6.890 | 6.120 | 5.350 | 6.230 | 6.120 |
| 19 | 5.680 | 5.130 | 17.500 | 16.600 | 4.960 | 10.500 | 17.700 | 6.670 | 9.390 | 5.680 | 5.790 | 6.120 |
| 20 | 6.340 | 5.130 | 21.000 | 15.400 | 4.960 | 13.800 | 17.700 | 6.230 | 9.150 | 6.450 | 5.900 | 6.010 |
| 21 | 5.570 | 5.130 | 24.400 | 8.920 | 5.490 | 13.700 | 16.900 | 6.120 | 9.030 | 6.230 | 5.790 | 6.010 |
| 22 | 5.570 | 5.130 | 28.200 | 5.600 | 10.400 | 14.600 | 12.400 | 6.120 | 9.270 | 5.680 | 5.790 | 6.230 |
| 23 | 5.570 | 5.460 | 27.300 | 6.920 | 24.700 | 15.400 | 11.200 | 6.670 | 6.560 | 5.570 | 6.450 | 5.680 |
| 24 | 5.460 | 5.570 | 17.500 | 6.810 | 26.300 | 10.800 | 15.800 | 6.670 | 5.570 | 5.570 | 6.780 | 5.790 |
| 25 | 5.680 | 5.900 | 12.700 | 7.030 | 19.000 | 5.160 | 16.600 | 6.340 | 5.460 | 5.900 | 6.230 | 5.790 |
| 26 | 6.120 | 5.570 | 15.800 | 5.710 | 16.100 | 6.370 | 16.800 | 6.120 | 5.350 | 6.670 | 5.900 | 6.010 |
| 27 | 6.560 | 5.130 | 17.700 | 5.060 | 19.500 | 10.300 | 17.300 | 5.900 | 5.570 | 5.790 | 5.900 | 7.000 |
| 28 | 5.680 | 5.030 | 18.500 | 6.700 | 21.900 | 14.200 | 14.800 | 5.900 | 6.230 | 5.680 | 5.900 | 7.660 |
| 29 | 5.350 | 5.130 | 18.500 | 11.900 |  | 13.100 | 7.330 | 5.790 | 5.900 | 5.570 | 5.900 | 7.000 |
| 30 | 5.350 | 5.900 | 17.200 | 18.100 |  | 12.300 | 11.600 | 5.790 | 5.570 | 5.570 | 5.900 | 5.570 |
| 31 | 5.460 |  | 11.600 | 15.000 |  | 8.900 |  | 5.900 |  | 5.570 | 5.900 |  |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 16 | 61 | 10 | 30 | - | - | - | - | - | - | 0 | 10 | 16 | 14 | 16 | 17 | | | | | | |
| 11 | 6 | 61 | 11 | 22 | - | - | - | - | - | - | 0 | 8 | 3 | 11 | 3 | 14 | | | | | | |
| 12 | 4 | 61 | 12 | 14 | - | - | - | - | - | - | 0 | 5 | 10 | 7 | 10 | 9 | | | | | | |
| 12 | 18 | 61 | 12 | 29 | 2 | 2 | 1 | 1 | 3 | 2 | 49 | 9 | 51 | 7 | 100 | 11 | | | | | | |
| 1 | 2 | 62 | 1 | 26 | - | - | - | - | - | - | 16 | 5 | 31 | 6 | 47 | 8 | | | | | | |
| 1 | 15 | 62 | 1 | 25 | - | - | - | - | - | - | 7 | 5 | 15 | 7 | 22 | 9 | | | | | | |
| 2 | 5 | 62 | 2 | 16 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 4 | 22 | 6 | 29 | 7 | | | | | | |
| 2 | 19 | 62 | 3 | 2 | 0 | 1 | 0 | 2 | 0 | 2 | 26 | 11 | 29 | 13 | 55 | 17 | | | | | | |
| 3 | 5 | 62 | 3 | 19 | - | - | - | - | - | - | 23 | 5 | 24 | 7 | 47 | 9 | | | | | | |
| 3 | 19 | 62 | 4 | 4 | 1 | 1 | 0 | 1 | 1 | 1 | 13 | 6 | 20 | 6 | 33 | 9 | | | | | | |
| 4 | 2 | 62 | 4 | 12 | - | - | - | - | - | - | 78 | 10 | 30 | 7 | 108 | 12 | | | | | | |
| 4 | 16 | 62 | 4 | 27 | - | - | - | - | - | - | 9 | 6 | 15 | 7 | 24 | 9 | | | | | | |
| 5 | 7 | 62 | 7 | 11 | - | - | - | - | - | - | 33 | 7 | 15 | 7 | 48 | 10 | | | | | | |
| 5 | 21 | 62 | 6 | 22 | - | - | - | - | - | - | 2 | 3 | 13 | 5 | 15 | 6 | | | | | | |
| 6 | 4 | 62 | 8 | 1 | - | - | - | - | - | - | 4 | 11 | 27 | 14 | 31 | 18 | | | | | | |
| 6 | 19 | 62 | 8 | 14 | - | - | - | - | - | - | 11 | 10 | 9 | 6 | 20 | 12 | | | | | | |
| 7 | 2 | 62 | 8 | 7 | - | - | - | - | - | - | 6 | 6 | 29 | 10 | 35 | 12 | | | | | | |
| 7 | 16 | 62 | 8 | 14 | - | - | - | - | - | - | 2 | 5 | 15 | 8 | 17 | 9 | | | | | | |
| 8 | 6 | 62 | 10 | 8 | - | - | - | - | - | - | 4 | 10 | 19 | 14 | 23 | 17 | | | | | | |
| 8 | 20 | 62 | 9 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 5 | 27 | 8 | 31 | 9 | | | | | | |
| 9 | 17 | 62 | 10 | 12 | - | - | - | - | - | - | 0 | 17 | 17 | 17 | 17 | 24 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** PENNSYLVANIA
**MAJOR BASIN** NORTH ATLANTIC
**MINOR BASIN** DELAWARE-SCHUYLKILL RIVERS
**STATION LOCATION** SCHUYLKILL RIVER AT
PHILADELPHIA, PENNSYLVANIA 74

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 3 | 61 | 7000 | 40 | 0 | 3580 | 0 | 2360 | 0 | 580 | 410 | 20 | 290 | 38 | 5 | 51 | 4 | 68 | 2 | 29 | 1 | 52 | 1 | | | | | | | | | | |
| 10 | 16 | 61 | 3600 | 0 | 0 | 1740 | 0 | 460 | 0 | 850 | 520 | 190 | 440 | 38 | 3 | 68 | 3 | 51 | 2 | 34 | 2 | 88 | 1 | | | | | | | | | | |
| 11 | 6 | 61 | 3500 | 0 | 40 | 1300 | 0 | 1470 | 0 | 410 | 310 | 40 | 80 | 51 | 4 | 38 | 3 | 34 | 2 | 68 | 2 | | | | | | | | | | | | |
| 11 | 20 | 61 | 500 | 0 | 0 | 110 | 0 | 20 | 0 | 40 | 330 | 20 | 100 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 300 | 0 | 0 | 20 | 0 | 40 | 0 | 20 | 190 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 400 | 0 | 0 | 20 | 0 | 40 | 20 | 20 | 310 | 0 | 100 | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 600 | 0 | 70 | 20 | 0 | 110 | 0 | 90 | 270 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 400 | 0 | 0 | 0 | 20 | 20 | 0 | 160 | 180 | 0 | 270 | 68 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 2300 | 160 | 200 | 0 | 0 | 110 | 0 | 1690 | 140 | 20 | 20 | 71 | 4 | 68 | 2 | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 700 | 0 | 0 | 0 | 0 | 180 | 20 | 230 | 230 | 0 | 90 | 71 | 1 | 51 | 1 | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 300 | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 250 | 40 | 20 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 400 | 120 | 0 | 0 | 0 | 0 | 0 | 40 | 190 | 0 | 120 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 2300 | 0 | 0 | 20 | 0 | 170 | 20 | 190 | 1950 | 40 | 410 | 84 | 1 | 82 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 1100 | 0 | 0 | 0 | 0 | 120 | 20 | 170 | 810 | 20 | 100 | 87 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 9000 | 1720 | 0 | 1240 | 0 | 2150 | 130 | 1180 | 2570 | 100 | 480 | 51 | 4 | 92 | 4 | 68 | 3 | 3 | 3 | 4 | 3 | 33 | 2 | 34 | 1 | 87 | 1 | 88 | 1 | | |
| 5 | 21 | 62 | 15400 | 950 | 0 | 11470 | 0 | 790 | 0 | 250 | 1900 | 120 | 210 | 38 | 6 | 25 | 5 | 51 | 3 | 92 | 3 | 35 | 3 | 44 | 3 | 3 | 2 | 33 | 2 | 88 | 2 | 87 | 2 |
| 6 | 4 | 62 | 6600 | 380 | 0 | 2980 | 0 | 1950 | 50 | 540 | 680 | 70 | 520 | 51 | 4 | 38 | 4 | 68 | 2 | 3 | 2 | 24 | 2 | 92 | 1 | 88 | 1 | 33 | 1 | 40 | 1 | | |
| 6 | 19 | 62 | 41500 | 830 | 40 | 12880 | 40 | 20490 | 620 | 2190 | 4390 | 170 | 700 | 51 | 8 | 38 | 6 | 25 | 4 | 88 | 4 | 3 | 3 | 92 | 3 | 87 | 3 | 40 | 3 | 60 | 2 | 45 | 2 |
| 7 | 2 | 62 | 63300 | 680 | 250 | 47940 | 0 | 1650 | 0 | 7600 | 5230 | 1310 | 1560 | 38 | 8 | 44 | 7 | 68 | 6 | 88 | 4 | 29 | 4 | 51 | 4 | 25 | 4 | 31 | 3 | 40 | 3 | | |
| 7 | 16 | 62 | 47100 | 540 | 0 | 31220 | 0 | 1530 | 170 | 1620 | 12010 | 1080 | 660 | 38 | 8 | 88 | 7 | 25 | 5 | 68 | 4 | 51 | 4 | 44 | 3 | 73 | 3 | 34 | 3 | 40 | 3 | 33 | 3 |
| 8 | 6 | 62 | 40300 | 970 | 210 | 16410 | 0 | 930 | 590 | 15450 | 5780 | 5320 | 1600 | 68 | 7 | 38 | 7 | 88 | 5 | 51 | 3 | 32 | 3 | 40 | 3 | 9 | 3 | 62 | 2 | 25 | 2 | 87 | 2 |
| 8 | 20 | 62 | 45300 | 680 | 40 | 21190 | 0 | 5610 | 0 | 11100 | 6670 | 5910 | 2240 | 38 | 7 | 68 | 7 | 51 | 6 | 88 | 5 | 87 | 3 | 37 | 3 | 40 | 3 | 3 | 3 | 25 | 2 | 30 | 2 |
| 9 | 17 | 62 | 10700 | 200 | 230 | 8360 | 0 | 450 | 0 | 470 | 1010 | 1730 | 520 | 38 | 6 | 88 | 3 | 26 | 3 | 40 | 2 | 68 | 2 | 51 | 1 | 17 | 1 | 3 | 1 | | | | |

# PLANKTON POPULATION

**MAJOR BASIN** NORTH ATLANTIC

**MINOR BASIN** DELAWARE-SCHUYLKILL RIVERS

**STATION LOCATION** SCHUYLKILL RIVER AT
PHILADELPHIA, PENNSYLVANIA 074

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 3 | 61 | 62 | 11 | 70 | 9 | 2 | 6 | 92 | 6 | 68 | 0 | 0 | 32 | 20 | 3 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 62 | 18 | 26 | 10 | 70 | 9 | 89 | 5 | 58 | 0 | 0 | 17 | 15 | 2 | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 26 | 24 | 70 | 17 | 65 | 6 | 92 | 5 | 48 | 0 | 0 | 280 | 15 | 6 | 20 | 1 | | | | | | | 2 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 26 | 25 | 70 | 16 | 92 | 10 | 74 | 8 | 41 | 0 | 10 | 43 | 20 | 3 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 70 | 20 | 71 | 12 | 2 | 6 | 93 | 6 | 56 | 0 | 10 | 49 | 15 | 4 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 70 | 47 | 65 | 5 | 93 | 5 | 2 | 4 | 39 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 70 | 42 | 2 | 6 | 64 | 5 | 65 | 4 | 43 | 230 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 1 | 15 | 62 | 62 | 18 | 36 | 10 | 64 | 5 | 71 | 4 | 63 | 160 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 2 | 0 |
| 2 | 5 | 62 | 82 | 15 | 70 | 12 | 92 | 5 | 62 | 6 | 62 | 180 | 10 | 2 | | | | | | | | | | | 1 | | | | | | | 2 | 0 |
| 2 | 19 | 62 | 82 | 33 | 70 | 13 | 2 | 9 | 93 | 4 | 41 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 3 | 5 | 62 | 65 | 6 | 66 | 6 | 36 | 6 | 62 | 6 | 76 | 40 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 62 | 12 | 71 | 9 | 36 | 5 | 70 | 4 | 70 | 230 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 36 | 14 | 47 | 13 | 62 | 8 | 65 | 7 | 58 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 65 | 15 | 86 | 8 | 2 | 5 | 70 | 4 | 68 | 120 | 0 | 1 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 92 | 64 | 65 | 5 | 70 | 4 | 62 | 3 | 24 | 20 | 0 | 46 | 15 | 3 | 6 | 1 | | | | | | | 4 | 50 | 1 | | | | | 2 | 4 |
| 5 | 21 | 62 | 92 | 29 | 70 | 8 | 2 | 4 | 86 | 4 | 55 | 0 | 0 | 14 | 15 | 2 | | | | | | | | | 10 | 50 | 2 | 76 | 1 | | | 4 | 0 |
| 6 | 4 | 62 | 92 | 21 | 70 | 19 | 26 | 10 | 62 | 6 | 44 | 0 | 10 | 220 | 46 | 5 | 2 | 5 | 20 | 1 | 11 | 1 | 15 | 1 | 64 | 50 | 5 | 76 | 2 | 51 | 1 | 1 | 0 |
| 6 | 19 | 62 | 26 | 25 | 10 | 19 | 92 | 8 | 27 | 6 | 42 | 0 | 0 | 76 | 15 | 4 | 17 | 3 | | | | | | | 18 | 50 | 2 | 51 | 1 | 76 | 1 | 5 | 0 |
| 7 | 2 | 62 | 26 | 41 | 70 | 14 | 92 | 6 | 62 | 5 | 34 | 0 | 0 | 1320 | 2 | 8 | 22 | 5 | 15 | 4 | 18 | 3 | 11 | 2 | 140 | 50 | 5 | 76 | 4 | | | 5 | 0 |
| 7 | 16 | 62 | 70 | 59 | 26 | 19 | 2 | 3 | 62 | 2 | 17 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 26 | 73 | 70 | 17 | 92 | 2 | 36 | 1 | 7 | 0 | 0 | 848 | 2 | 7 | 9 | 6 | 22 | 6 | 15 | 4 | 17 | 2 | 67 | 50 | 5 | 51 | 1 | 53 | 1 | 2 | 0 |
| 8 | 20 | 62 | 26 | 66 | 70 | 17 | 92 | 2 | 65 | 2 | 13 | 0 | 0 | 2400 | 2 | 9 | 15 | 5 | 22 | 5 | 18 | 3 | 17 | 2 | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 26 | 58 | 70 | 26 | 58 | 2 | 92 | 2 | 12 | 0 | 0 | 821 | 2 | 7 | 20 | 6 | 4 | 3 | 21 | 3 | 11 | 2 | 0 | | | | | | | 0 | 0 |

***RESULTS IN MICROGRAMS PER LITER***
*(Parts per billion)*

**STATION LOCATION** SCHUYLKILL RIVER AT
PHILADELPHIA, PENNSYLVANIA

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 16 | 61 | 10 | 26 | 5820 | 309 | 151 | 158 | 5 | 24 | 64 | 12 | 5 | 42 | 5 | 16 | 23 | 3 | 1 |
| 11 | 13 | 61 | 11 | 22 | 5330 | 312 | 134 | 178 | 1 | 18 | 74 | 9 | 6 | 59 | 0 | 16 | 5 | 7 | 1 |
| 12 | 21 | 61 | 1 | 6 | 4600 | 389 | 134 | 255 | 1 | 20 | 68 | 14 | 8 | 44 | 2 | 19 | 8 | 3 | 1 |
| 2 | 17 | 62 | 3 | 9 | 5250 | 298 | 139 | 159 | 3 | 21 | 58 | 13 | 6 | 37 | 2 | 24 | 11 | 3 | 1 |
| 4 | 18 | 62 | 4 | 27 | 5199 | 180 | 95 | 85 | 5 | 23 | 37 | 9 | 4 | 22 | 2 | 13 | 8 | 1 | |
| 6 | 20 | 62 | 7 | 1 | 5570 | 367 | 208 | 159 | 2 | 27 | 69 | 10 | 6 | 48 | 5 | 29 | 17 | 8 | 5 |
| 8 | 1 | 62 | 8 | 24 | 5340 | 263 | 155 | 108 | 2 | 23 | 59 | 10 | 5 | 43 | 1 | 20 | 11 | 3 | 3 |
| 8 | 27 | 62 | 9 | 21 | 5410 | 357 | 191 | 166 | 2 | 23 | 69 | 6 | 5 | 53 | 5 | 29 | 19 | 2 | 4 |
| 9 | 21 | 62 | 10 | 9 | 4740 | 292 | 136 | 156 | 1 | 18 | 49 | 12 | 6 | 30 | 1 | 22 | 10 | 3 | 3 |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** PENNSYLVANIA

**MAJOR BASIN** NORTH ATLANTIC

**MINOR BASIN** DELAWARE SCHUYLKILL RIVERS

**STATION LOCATION** SCHUYLKILL RIVER AT

PHILADELPHIA, PENNSYLVANIA 74

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 22.8 | 7.6 | 7.6 | 1.7 | 15 | - | - | .2 | 26 | 80 | 218 | 32 | 25 | 104 | .6 | 320 | 7700 |
| 10 | 9 | 61 | 19.4 | 6.1 | 7.5 | .8 | 8 | 3.8 | 6.4 | .2 | 22 | 77 | 194 | 22 | 20 | 89 | .8 | 301 | 3500 |
| 10 | 16 | 61 | 17.8 | 6.3 | 7.4 | 1.8 | 12 | 2.9 | 4.6 | .2 | 26 | 73 | 280 | 28 | 25 | 163 | .7 | 383 | - |
| 10 | 23 | 61 | 16.0 | 6.5 | 7.4 | - | 11 | 1.8 | 2.9 | .5 | 31 | 73 | 298 | 23 | 20 | 176 | .8 | 399 | 2900 |
| 10 | 30 | 61 | 15.5 | 6.4 | 7.4 | 1.3 | 13 | - | - | .3 | 28 | 80 | 256 | 11 | 17 | - | 4.5 | - | 4000 |
| 11 | 6 | 61 | 17.8 | 5.1 | 7.4 | 1.6 | 11 | - | - | .2 | 32 | 74 | 242 | 12 | 10 | - | .9 | - | 1800 |
| 11 | 13 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 700 |
| 11 | 20 | 61 | 13.9 | 8.4 | 7.5 | 1.7 | 12 | 4.7 | 5.8 | .3 | 24 | 70 | 180 | 17 | 8 | 111 | .9 | 310 | 1400 |
| 11 | 27 | 61 | 11.1 | 8.9 | 7.5 | 1.5 | 15 | 5.9 | 7.3 | .3 | 22 | 68 | 152 | 12 | 12 | 88 | .8 | 262 | 2900 |
| 12 | 4 | 61 | 8.9 | 9.4 | 7.3 | 1.7 | 10 | 2.0 | 7.6 | .4 | 19 | 67 | 164 | 12 | 8 | - | .7 | 247 | 3300 |
| 12 | 11 | 61 | 7.2 | 8.4 | 7.4 | 1.8 | 13 | 1.9 | 7.7 | .6 | 26 | 78 | 154 | 8 | 7 | 74 | .6 | 249 | 580 |
| 12 | 18 | 61 | 4.4 | 9.8 | 7.4 | 1.8 | 15 | 1.9 | 4.8 | .8 | 28 | 69 | 138 | 12 | 7 | 89 | .5 | 257 | 2400 |
| 12 | 26 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1300 |
| 1 | 2 | 62 | 5.0 | 12.2 | 7.5 | 1.2 | 8 | 1.5 | 2.0 | .9 | 19 | 60 | 108 | 8 | 7 | 64 | .6 | 191 | 1900 |
| 1 | 8 | 62 | 3.9 | 13.0 | 7.4 | 4.3 | 56 | 3.6 | 10.8 | .4 | 10 | 38 | 78 | 70 | 220 | 46 | .3 | 154 | 14000 |
| 1 | 15 | 62 | 3.9 | 13.8 | 7.5 | 1.9 | 9 | 1.6 | 4.9 | .4 | 12 | 41 | 100 | 7 | 18 | 49 | .2 | 157 | 1200 |
| 1 | 22 | 62 | 4.4 | 11.8 | 7.4 | 2.4 | 10 | 1.9 | - | .5 | 13 | 54 | 106 | 5 | 8 | 61 | .4 | 179 | 2600 |
| 1 | 29 | 62 | 5.6 | 11.6 | 7.5 | 3.4 | 10 | 1.0 | 2.7 | .6 | 14 | 53 | 104 | 7 | 8 | 67 | .5 | 205 | 2400 |
| 2 | 5 | 62 | 5.6 | 11.8 | 7.5 | 1.9 | 13 | 1.8 | 4.6 | .6 | 20 | 57 | 126 | 8 | 8 | 69 | .4 | 216 | 4300 |
| 2 | 13 | 62 | 3.3 | 11.7 | 7.5 | 1.2 | 18 | .9 | 3.6 | .9 | 15 | 58 | 110 | 20 | 8 | 60 | - | 194 | 5000 |
| 2 | 19 | 62 | 7.2 | 10.0 | 7.5 | 1.8 | 14 | .7 | 1.6 | .8 | 27 | 69 | 178 | 15 | 7 | 130 | .1 | 324 | 7200 |
| 2 | 26 | 62 | 6.3 | 11.8 | 7.3 | 5.0 | 34 | 1.5 | 2.6 | .6 | 8 | 33 | 96 | 150 | 170 | 62 | .3 | 151 | 12000 |
| 3 | 5 | 62 | 5.0 | 13.1 | 7.5 | 1.1 | 12 | 2.6 | 4.9 | .6 | 9 | 39 | 80 | 30 | 35 | 45 | .2 | 145 | 2000 |
| 3 | 12 | 62 | 6.7 | 11.4 | 7.4 | 2.2 | 18 | .8 | - | .4 | 11 | 47 | 96 | 46 | 75 | 53 | .2 | 175 | 3700 |
| 3 | 19 | 62 | 7.2 | 11.2 | 7.5 | 1.2 | 12 | 2.8 | 4.8 | .2 | 10 | 43 | 84 | 37 | 35 | 48 | .3 | 149 | 4500 |
| 3 | 26 | 62 | 10.0 | 11.2 | 7.5 | 1.1 | 11 | 2.8 | 3.8 | .2 | 9 | 41 | 74 | 20 | 30 | 45 | .4 | 163 | 1400 |
| 4 | 2 | 62 | 14.4 | 10.1 | 7.4 | 3.0 | 30 | .1 | 6.9 | .2 | 6 | 35 | 80 | 50 | 180 | 40 | .3 | 138 | 17000 |
| 4 | 9 | 62 | 11.7 | 10.1 | 7.3 | - | 16 | 3.4 | 3.9 | .2 | 8 | 44 | 86 | 54 | 60 | - | .3 | - | 6100 |
| 4 | 16 | 62 | 9.4 | 11.2 | 7.4 | - | 9 | - | - | .1 | 8 | 40 | 70 | 15 | 15 | - | .3 | - | 2800 |
| 4 | 23 | 62 | 15.6 | 8.6 | 7.5 | - | 10 | - | - | .1 | 14 | 46 | 98 | 20 | 15 | - | .4 | - | 1300 |
| 4 | 30 | 62 | 21.7 | 6.2 | 7.5 | - | 16 | - | - | .2 | 12 | 57 | 120 | 17 | 15 | - | .4 | - | 350 |
| 5 | 7 | 62 | 19.4 | 7.3 | 7.5 | 1.9 | 13 | 2.6 | 4.8 | .1 | 13 | 60 | 120 | 20 | 10 | 65 | .5 | 200 | 1400 |
| 5 | 14 | 62 | 18.3 | 7.7 | 7.4 | 1.5 | 10 | 2.9 | 4.8 | .2 | 17 | 61 | 176 | 8 | 8 | 124 | .5 | 289 | 730 |
| 5 | 21 | 62 | 25.0 | 6.3 | 7.5 | .0 | 12 | 2.7 | 4.8 | .1 | 20 | 65 | 186 | 8 | 8 | 136 | .5 | 303 | 2200 |
| 5 | 28 | 62 | 25.0 | 6.2 | 7.2 | 2.5 | 19 | 3.9 | 7.3 | .2 | 20 | 59 | 162 | 28 | 25 | 105 | .5 | 279 | 5800 |
| 6 | 4 | 62 | 25.6 | 6.0 | 7.6 | 2.2 | 12 | 2.7 | 5.9 | .1 | 18 | 71 | 192 | 18 | 20 | 137 | .5 | 337 | 7200 |
| 6 | 11 | 62 | 26.1 | 7.3 | 7.7 | 2.9 | 17 | - | - | .0 | 19 | 78 | 176 | 20 | 15 | 108 | .4 | 322 | 5200 |
| 6 | 14 | 62 | 27.2 | 7.1 | 7.7 | 3.2 | 10 | - | - | .0 | 16 | 64 | 146 | 46 | 18 | 94 | .6 | 258 | - |
| 6 | 18 | 62 | 27.2 | 7.1 | 7.7 | 3.2 | 10 | - | - | .0 | 16 | 64 | 146 | 46 | 18 | 94 | .6 | 258 | - |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

| | |
|---|---|
| **STATE** | PENNSYLVANIA |
| **MAJOR BASIN** | NORTH ATLANTIC |
| **MINOR BASIN** | DELAWARE SCHUYLKILL RIVERS |
| **STATION LOCATION** | SCHUYLKILL RIVER AT<br>PHILADELPHIA, PENNSYLVANIA |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOT DISSO SOL mg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | |
| 6 | 25 | 62 | 27.2 | 6.1 | 7.5 | 2.2 | 10 | - | - | .1 | 20 | 75 | 154 | 33 | 15 | 85 | .7 | 2 |
| 7 | 2 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 7 | 9 | 62 | 27.8 | 7.1 | 8.1 | 4.6 | 22 | - | - | .1 | 24 | 86 | 166 | 46 | 25 | 91 | .5 | 2 |
| 7 | 16 | 62 | 26.7 | 4.3 | 7.6 | 4.0 | 25 | - | - | .1 | 19 | 87 | 178 | 36 | 15 | 98 | .1 | 3 |
| 7 | 23 | 62 | 26.7 | 5.6 | 7.7 | 2.7 | 16 | - | - | .0 | 22 | 93 | 178 | 38 | 15 | 103 | 1.0 | 3 |
| 7 | 30 | 62 | 25.6 | 5.1 | 8.4 | 4.3 | 26 | 3.0 | 6.9 | .1 | 26 | 94 | 200 | 32 | 15 | 122 | .8 | 3 |
| 8 | 6 | 62 | 27.2 | 6.7 | 8.0 | 4.1 | 23 | 3.7 | 9.6 | .1 | 28 | 84 | 194 | 44 | 18 | - | .8 | |
| 8 | 13 | 62 | 23.9 | 4.5 | 7.3 | .2 | 16 | - | - | .2 | 17 | - | 106 | 76 | - | 53 | .5 | 1 |
| 8 | 20 | 62 | 25.6 | 7.6 | 7.7 | 3.6 | 21 | 2.9 | 8.9 | .0 | 21 | 69 | 142 | 46 | 23 | 80 | .5 | 2 |
| 8 | 27 | 62 | 26.1 | 11.0 | 8.7 | 6.4 | 18 | - | - | .1 | 23 | 87 | 168 | 48 | 25 | 99 | .7 | 3 |
| 9 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| 9 | 4 | 62 | 26.1 | 4.7 | 7.5 | - | 16 | - | - | .2 | 29 | 89 | 162 | 36 | 18 | - | .7 | |
| 9 | 10 | 62 | 23.9 | 5.2 | 7.5 | 2.1 | 17 | 2.5 | 5.9 | .0 | 22 | 68 | 172 | 38 | 12 | 115 | .7 | 3 |
| 9 | 17 | 62 | 25.0 | 5.5 | 7.5 | 1.8 | 15 | 1.9 | 4.8 | .0 | 27 | 68 | 242 | 38 | 12 | 178 | .7 | 4 |
| 9 | 24 | 62 | 20.0 | 5.2 | 7.3 | .9 | 13 | - | - | .1 | 29 | 63 | 232 | 36 | 10 | 190 | 1.1 | 4 |

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Philadelphia, Pennsylvania
Operated by U.S. Geological Survey

MINOR BASIN Delaware-Schuylkill Rivers

STATION LOCATION Schuylkill River at
Philadelphia, Pennsylvania

| Day | October | November | December | January | February | March | April | May. | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .300 | .382 | .744 | 1.000 | 1.040 | 14.700 | 8.010 | 1.860 | 1.530 | .478 | .198 | .181 |
| 2 | .382 | .325 | .707 | 1.000 | 1.080 | 7.550 | 7.390 | 2.010 | 1.200 | .414 | .198 | .599 |
| 3 | .574 | .325 | .638 | .966 | 1.120 | 5.160 | 4.440 | 2.150 | .818 | .382 | .149 | .892 |
| 4 | .542 | .325 | .638 | .929 | 1.120 | 4.040 | 3.550 | 2.150 | .707 | .300 | .135 | .638 |
| 5 | .882 | .350 | .638 | .855 | 1.200 | 3.500 | 3.240 | 1.770 | .638 | .300 | .135 | .478 |
| 6 | .670 | .350 | .574 | 2.110 | 1.450 | 3.390 | 3.030 | 1.590 | .868 | .275 | .135 | .542 |
| 7 | .478 | .606 | .606 | 15.700 | 1.450 | 3.240 | 3.610 | 1.450 | 1.040 | .300 | .198 | .574 |
| 8 | .478 | 1.120 | .542 | 12.300 | 1.080 | 2.980 | 7.400 | 1.410 | .744 | .325 | .300 | .414 |
| 9 | .478 | .855 | .446 | 8.160 | 1.040 | 2.930 | 6.760 | 1.370 | .574 | .325 | .930 | .325 |
| 10 | .446 | .574 | .542 | 5.580 | 1.080 | 3.030 | 7.540 | 1.370 | .510 | .235 | 2.300 | .235 |
| 11 | .382 | .446 | .542 | 3.880 | .966 | 4.270 | 5.760 | 1.290 | .510 | .235 | 2.610 | .255 |
| 12 | .382 | .414 | 1.020 | 3.080 | .818 | 17.800 | 5.640 | 1.290 | 1.350 | .216 | 1.330 | .489 |
| 13 | .350 | .382 | 1.500 | 2.640 | .892 | 18.500 | 8.640 | 1.240 | 2.730 | .235 | .781 | .414 |
| 14 | .414 | .478 | 1.370 | 2.340 | .966 | 9.350 | 6.690 | 1.160 | 2.540 | .235 | .606 | .275 |
| 15 | .510 | .606 | .929 | 2.390 | .966 | 6.820 | 5.460 | 1.120 | 1.590 | .275 | .478 | .255 |
| 16 | .478 | .638 | .700 | 3.440 | 1.040 | 5.640 | 5.040 | 1.080 | 1.160 | .300 | .382 | .235 |
| 17 | .414 | .744 | .750 | 3.410 | .966 | 4.860 | 4.500 | 1.040 | .929 | .275 | .478 | .275 |
| 18 | .382 | .781 | 1.500 | 2.390 | .929 | 4.160 | 3.990 | 1.000 | .781 | .519 | .275 | .275 |
| 19 | .350 | .707 | 4.000 | 2.010 | 1.200 | 3.710 | 3.610 | .966 | .670 | .463 | .235 | .325 |
| 20 | .350 | .638 | 3.000 | 1.910 | 1.290 | 3.440 | 3.340 | .892 | .638 | .300 | .255 | .414 |
| 21 | .542 | .606 | 2.200 | 1.730 | 1.240 | 4.030 | 3.140 | .892 | .638 | .325 | .216 | .350 |
| 22 | .670 | .574 | 1.800 | 1.630 | 1.240 | 9.200 | 2.830 | .966 | .574 | .300 | .198 | .300 |
| 23 | .638 | .542 | 1.700 | 1.770 | 1.530 | 6.360 | 2.640 | .818 | .510 | .275 | .216 | .300 |
| 24 | .414 | 1.220 | 1.600 | 1.860 | 8.600 | 5.040 | 2.490 | 1.260 | .752 | .325 | .181 | .275 |
| 25 | .414 | 2.200 | 1.500 | 1.630 | 12.600 | 4.330 | 2.290 | 2.260 | 1.440 | .542 | .164 | .275 |
| 26 | .446 | 1.480 | 1.400 | 1.540 | 11.900 | 3.770 | 2.100 | 1.400 | .892 | .446 | .164 | .325 |
| 27 | .414 | 1.290 | 1.300 | 1.590 | 18.200 | 3.440 | 2.010 | .966 | .744 | .235 | .151 | .574 |
| 28 | .414 | 1.160 | 1.350 | 2.010 | 17.700 | 3.140 | 1.910 | .818 | .606 | .198 | 1.050 | 1.340 |
| 29 | .382 | 1.000 | 1.450 | 1.680 |  | 2.880 | 1.770 | .707 | .478 | .216 | .414 | 2.590 |
| 30 | .382 | .855 | 1.240 | 1.450 |  | 2.680 | 1.770 | .744 | .414 | .216 | .638 | 2.340 |
| 31 | .350 |  | 1.000 | 1.200 |  | 1.590 |  | .707 |  | .216 | .275 |  |

**STATION LOCATION** SHENANDOAH RIVER AT

BERRYVILLE, VIRGINIA

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 12 | 1 | 1 | 3 | 2 | 4 | 2 | 4 | 5 | 9 | 7 | 13 | 9 | | | | | | |
| 10 | 9 | 61 | 10 | 24 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 4 | 21 | 6 | 21 | 7 | | | | | | |
| 10 | 16 | 61 | 10 | 25 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 4 | 9 | 6 | 10 | 7 | | | | | | |
| 10 | 23 | 61 | 11 | 6 | 4 | 4 | 1 | 1 | 5 | 4 | 102 | 11 | 34 | 6 | 136 | 12 | | | | | | |
| 10 | 30 | 61 | 11 | 7 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 4 | 18 | 5 | 22 | 6 | | | | | | |
| 11 | 7 | 61 | 11 | 22 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 5 | 18 | 7 | 20 | 9 | | | | | | |
| 11 | 14 | 61 | 11 | 28 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 5 | 18 | 8 | 24 | 9 | | | | | | |
| 11 | 21 | 61 | 11 | 30 | 0 | 0 | 0 | 1 | 0 | 1 | 8 | 4 | 22 | 6 | 30 | 7 | | | | | | |
| 11 | 28 | 61 | 12 | 7 | 0 | 1 | 0 | 1 | 0 | 1 | 22 | 5 | 31 | 6 | 53 | 8 | | | | | | |
| 12 | 5 | 61 | 12 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 5 | 38 | 8 | 41 | 9 | | | | | | |
| 12 | 12 | 61 | 12 | 20 | 0 | 1 | 0 | 1 | 0 | 1 | 15 | 5 | 21 | 6 | 36 | 8 | | | | | | |
| 12 | 19 | 61 | 12 | 28 | 1 | 1 | 0 | 1 | 1 | 1 | 45 | 6 | 18 | 5 | 63 | 8 | | | | | | |
| 12 | 27 | 61 | 1 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 17 | 4 | 14 | 4 | 31 | 6 | | | | | | |
| 1 | 3 | 62 | 1 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 11 | 4 | 11 | 5 | 22 | 6 | | | | | | |
| 1 | 9 | 62 | 1 | 19 | 3 | 3 | 0 | 1 | 3 | 2 | 59 | 9 | 22 | 5 | 81 | 10 | | | | | | |
| 1 | 16 | 62 | 1 | 24 | 2 | 2 | 0 | 1 | 2 | 2 | 42 | 7 | 27 | 6 | 69 | 9 | | | | | | |
| 1 | 23 | 62 | 1 | 31 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 5 | 9 | 5 | 17 | 7 | | | | | | |
| 1 | 30 | 62 | 2 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 4 | 9 | 5 | 17 | 6 | | | | | | |
| 2 | 6 | 62 | 2 | 19 | 1 | 1 | 1 | 1 | 2 | 1 | 8 | 4 | 16 | 5 | 24 | 7 | | | | | | |
| 2 | 13 | 62 | 2 | 27 | 0 | 0 | 1 | 1 | 1 | 1 | 11 | 4 | 23 | 6 | 34 | 7 | | | | | | |
| 2 | 20 | 62 | 3 | 6 | 0 | 0 | 1 | 1 | 1 | 1 | 15 | 6 | 15 | 7 | 30 | 8 | | | | | | |
| 2 | 27 | 62 | 3 | 14 | 1 | 2 | 0 | 1 | 1 | 2 | 59 | 14 | 37 | 12 | 96 | 18 | | | | | | |
| 3 | 12 | 62 | 3 | 22 | 0 | 1 | 0 | 1 | 0 | 1 | 38 | 5 | 19 | 4 | 57 | 6 | | | | | | |
| 3 | 13 | 62 | 3 | 22 | 3 | 3 | 0 | 1 | 3 | 3 | 96 | 9 | 29 | 5 | 125 | 10 | | | | | | |
| 3 | 20 | 62 | 4 | 2 | 1 | 2 | 0 | 1 | 1 | 2 | 50 | 7 | 12 | 5 | 62 | 9 | | | | | | |
| 3 | 27 | 62 | 4 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 15 | 5 | 10 | 5 | 25 | 7 | | | | | | |
| 4 | 3 | 62 | 4 | 20 | 2 | 1 | 0 | 0 | 2 | 1 | 39 | 6 | 9 | 5 | 48 | 7 | | | | | | |
| 4 | 10 | 62 | 4 | 27 | 0 | 1 | 0 | 1 | 0 | 1 | 39 | 6 | 16 | 5 | 55 | 7 | | | | | | |
| 4 | 17 | 62 | 4 | 30 | 1 | 1 | 0 | 1 | 1 | 1 | 14 | 5 | 13 | 5 | 27 | 7 | | | | | | |
| 4 | 24 | 62 | 5 | 22 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 7 | 80 | 10 | 85 | 12 | | | | | | |
| 5 | 1 | 62 | 6 | 4 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 5 | 15 | 7 | 20 | 8 | | | | | | |
| 5 | 8 | 62 | 6 | 11 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 5 | 11 | 6 | 13 | 7 | | | | | | |
| 5 | 15 | 62 | 6 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 6 | 14 | 9 | 22 | 11 | | | | | | |
| 5 | 23 | 62 | 6 | 27 | 0 | 0 | 0 | 1 | 0 | 1 | 9 | 6 | 12 | 7 | 21 | 9 | | | | | | |
| 5 | 31 | 62 | 7 | 2 | 5 | 4 | 1 | 1 | 6 | 4 | 105 | 19 | 30 | 7 | 135 | 20 | | | | | | |
| 6 | 6 | 62 | 7 | 6 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 6 | 20 | 8 | 22 | 10 | | | | | | |
| 6 | 13 | 62 | 7 | 16 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 8 | 8 | 9 | 33 | 12 | | | | | | |
| 6 | 20 | 62 | 7 | 18 | 2 | 2 | 0 | 1 | 2 | 2 | 50 | 9 | 9 | 6 | 59 | 11 | | | | | | |
| 6 | 27 | 62 | 7 | 23 | 0 | 0 | 1 | 1 | 1 | 1 | 6 | 5 | 5 | 7 | 11 | 9 | | | | | | |
| 8 | 1 | 62 | 8 | 17 | 0 | 1 | 0 | 1 | 0 | 1 | 13 | 7 | 16 | 7 | 29 | 10 | | | | | | |
| 8 | 8 | 62 | 8 | 29 | 2 | 2 | 1 | 1 | 3 | 2 | 28 | 8 | 16 | 8 | 44 | 11 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 15 | 62 | 8 | 27 | 3 | 3 | 1 | 1 | 4 | 3 | 31 | 14 | 9 | 4 | 40 | 14 | | | | | | |
| 8 | 22 | 62 | 9 | 5 | 0 | 0 | 1 | 1 | 1 | 1 | 7 | 6 | 13 | 8 | 20 | 10 | | | | | | |
| 8 | 29 | 62 | 9 | 11 | 0 | 1 | 0 | 0 | 0 | 1 | 8 | 7 | 3 | 10 | 11 | 12 | | | | | | |
| 9 | 5 | 62 | 9 | 18 | 1 | 1 | 0 | 1 | 1 | 1 | 21 | 9 | 18 | 9 | 39 | 13 | | | | | | |
| 9 | 12 | 62 | 9 | 27 | 0 | 0 | 0 | 1 | 0 | 1 | 18 | 7 | 17 | 9 | 35 | 11 | | | | | | |
| 9 | 19 | 62 | 10 | 15 | 0 | 0 | 0 | 1 | 0 | 1 | 12 | 7 | 14 | 9 | 26 | 11 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** VIRGINIA

**MAJOR BASIN** NORTH ATLANTIC

**MINOR BASIN** POTOMAC RIVER

**STATION LOCATION** SHENANDOAH RIVER AT
BERRYVILLE, VIRGINIA

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Co* | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 400 | 40 | 0 | 0 | 0 | 20 | 0 | 20 | 270 | 0 | 20 | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 4700 | 60 | 0 | 2260 | 0 | 120 | 0 | 310 | 1970 | 150 | 730 | 38 | 4 | 42 | 2 | 87 | 2 | 44 | 2 | 88 | 1 | 68 | 1 | | | | | | |
| 11 | 7 | 61 | 800 | 0 | 0 | 210 | 0 | 40 | 0 | 100 | 440 | 40 | 100 | | | | | | | | | | | | | | | | | | |
| 11 | 21 | 61 | 2500 | 0 | 0 | 100 | 0 | 100 | 0 | 1450 | 850 | 190 | 460 | 68 | 7 | 87 | 2 | 71 | 1 | 92 | 1 | | | | | | | | | | |
| 12 | 5 | 61 | 2500 | 0 | 40 | 0 | 0 | 60 | 0 | 230 | 2170 | 100 | 500 | 91 | 4 | 92 | 2 | 87 | 2 | 68 | 1 | | | | | | | | | | |
| 12 | 19 | 61 | 9700 | 0 | 60 | 170 | 20 | 100 | 0 | 850 | 8510 | 190 | 1970 | 82 | 5 | 92 | 4 | 87 | 3 | 68 | 2 | 69 | 2 | 79 | 2 | 91 | 2 | 81 | 1 | 85 | 1 |
| 1 | 3 | 62 | 200 | 0 | 0 | 20 | 0 | 20 | 0 | 0 | 110 | 0 | 180 | | | | | | | | | | | | | | | | | | |
| 1 | 16 | 62 | 7800 | 0 | 20 | 60 | 0 | 80 | 0 | 730 | 6890 | 190 | 2030 | 79 | 4 | 87 | 4 | 88 | 3 | 73 | 3 | 82 | 3 | 92 | 2 | 69 | 2 | 85 | 2 | 91 | 1 |
| 2 | 6 | 62 | 4300 | 0 | 20 | 0 | 0 | 60 | 0 | 120 | 4110 | 40 | 460 | 91 | 4 | 92 | 4 | 82 | 2 | 88 | 1 | 87 | 1 | | | | | | | | |
| 2 | 20 | 62 | 2300 | 0 | 0 | 20 | 0 | 0 | 20 | 20 | 2190 | 0 | 680 | 91 | 4 | 92 | 2 | | | | | | | | | | | | | | |
| 3 | 13 | 62 | 6000 | 0 | 0 | 20 | 0 | 20 | 0 | 440 | 5550 | 120 | 3000 | 82 | 3 | 88 | 3 | 92 | 2 | 79 | 2 | 87 | 2 | 73 | 2 | 81 | 2 | 91 | 1 | 85 | 1 |
| 3 | 20 | 62 | 6300 | 0 | 0 | 50 | 0 | 20 | 20 | 290 | 5920 | 140 | 2850 | 68 | 1 | 82 | 1 | | | | | | | | | | | | | | |
| 4 | 3 | 62 | 33500 | 0 | 0 | 210 | 0 | 620 | 660 | 2770 | 29230 | 460 | 6210 | 82 | 6 | 88 | 6 | 79 | 5 | 92 | 5 | 69 | 5 | 81 | 4 | 85 | 3 | 63 | 3 | 51 | 2 |
| 4 | 17 | 62 | 1900 | 0 | 0 | 20 | 0 | 20 | 0 | 160 | 1700 | 20 | 1490 | 82 | 2 | 87 | 2 | 88 | 1 | | | | | | | | | | | | |
| 5 | 8 | 62 | 7500 | 20 | 150 | 1160 | 0 | 0 | 420 | 3880 | 1840 | 680 | 1220 | 68 | 5 | 71 | 3 | 38 | 2 | 65 | 2 | 87 | 1 | 69 | 1 | 88 | 1 | 44 | 1 | 92 | 1 |
| 5 | 21 | 62 | 10100 | 0 | 380 | 3730 | 0 | 380 | 0 | 3840 | 1770 | 1440 | 2150 | 68 | 4 | 38 | 4 | 69 | 3 | 71 | 3 | 33 | 3 | 87 | 2 | 30 | 2 | 17 | 2 | 88 | 2 |
| 6 | 6 | 62 | 4100 | 60 | 0 | 1490 | 0 | 250 | 0 | 500 | 1820 | 150 | 350 | 38 | 3 | 73 | 2 | 68 | 1 | 25 | 1 | 79 | 1 | 51 | 1 | 88 | 1 | 69 | 1 | 85 | 1 |
| 6 | 20 | 62 | 11600 | 150 | 20 | 1660 | 0 | 770 | 0 | 5710 | 3290 | 1010 | 970 | 68 | 5 | 38 | 3 | 92 | 3 | 79 | 3 | 51 | 2 | 87 | 2 | 82 | 1 | 25 | 1 | 73 | 1 |
| 7 | 6 | 62 | 45300 | 420 | 6540 | 9620 | 0 | 40 | 0 | 12070 | 16630 | 7090 | 13880 | 79 | 7 | 38 | 6 | 17 | 6 | 88 | 4 | 97 | 3 | 87 | 3 | 40 | 3 | 44 | 3 | 81 | 3 |
| 7 | 18 | 62 | 53100 | 4220 | 0 | 26810 | 0 | 1450 | 0 | 6830 | 13790 | 5280 | 6420 | 38 | 7 | 25 | 6 | 79 | 6 | 68 | 6 | 3 | 5 | 31 | 4 | 51 | 4 | 82 | 4 | 97 | 4 |
| 8 | 8 | 62 | 92400 | 4350 | 0 | 44960 | 0 | 1450 | 0 | 8490 | 33140 | 8690 | 7450 | 25 | 7 | 38 | 7 | 86 | 7 | 79 | 6 | 68 | 6 | 44 | 6 | 40 | 6 | 3 | 5 | 88 | 5 |
| 8 | 22 | 62 | 68300 | 2030 | 1270 | 35030 | 0 | 420 | 0 | 10970 | 18570 | 4350 | 3550 | 38 | 7 | 88 | 7 | 25 | 6 | 40 | 6 | 45 | 5 | 87 | 5 | 3 | 4 | 86 | 4 | 17 | 4 |
| 9 | 5 | 62 | 81500 | 550 | 0 | 30340 | 0 | 1100 | 0 | 26380 | 23130 | 19710 | 14940 | 38 | 7 | 87 | 6 | 40 | 6 | 86 | 6 | 79 | 5 | 88 | 5 | 26 | 4 | 25 | 3 | 44 | 3 |
| 9 | 19 | 62 | 5300 | 450 | 230 | 2880 | 0 | 0 | 0 | 540 | 1170 | 770 | 2540 | 38 | 4 | 40 | 2 | 3 | 2 | 68 | 2 | 87 | 2 | 44 | 1 | 88 | 1 | 17 | 1 | 26 | 1 |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable)* *Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable)* *Number per liter* | OTHER ANIMAL FORMS |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 23 | 21 | 64 | 9 | 65 | 8 | 16 | 6 | 56 | 0 | 0 | 27 | 46 | 1 | 15 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 65 | 21 | 64 | 15 | 70 | 11 | 23 | 6 | 47 | 0 | 0 | 13 | 15 | 2 | | | | | | | | | 1 | | | | | | | 3 | 0 |
| 11 | 7 | 61 | 26 | 17 | 92 | 11 | 65 | 8 | 16 | 7 | 57 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 11 | 21 | 61 | 26 | 29 | 92 | 11 | 64 | 10 | 82 | 6 | 44 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 12 | 5 | 61 | 86 | 49 | 93 | 7 | 64 | 7 | 93 | 7 | 30 | 0 | 0 | 14 | 6 | 1 | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 12 | 19 | 61 | 36 | 27 | 62 | 26 | 92 | 17 | 93 | 5 | 25 | 40 | 0 | 8 | 6 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 3 | 62 | 64 | 24 | 86 | 12 | 36 | 7 | 16 | 6 | 51 | 20 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 16 | 62 | 16 | 17 | 62 | 15 | 2 | 8 | 64 | 8 | 52 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 6 | 62 | 86 | 42 | 93 | 28 | 36 | 8 | 62 | 4 | 18 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 20 | 62 | 86 | 53 | 93 | 18 | 36 | 7 | 71 | 6 | 16 | 20 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 13 | 62 | 36 | 12 | 62 | 10 | 71 | 9 | 92 | 8 | 61 | 120 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 3 | 20 | 62 | 36 | 32 | 92 | 18 | 71 | 18 | 62 | 10 | 22 | 160 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 3 | 62 | 36 | 31 | 70 | 15 | 92 | 10 | 16 | 8 | 36 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 4 | 17 | 62 | 36 | 21 | 65 | 11 | 16 | 9 | 92 | 8 | 51 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 5 | 8 | 62 | 62 | 37 | 26 | 6 | 27 | 6 | 64 | 5 | 46 | 20 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 5 | 21 | 62 | 62 | 74 | 71 | 11 | 64 | 7 | 16 | 6 | 2 | 0 | 0 | 33 | 15 | 3 | | | | | | | | | 0 | | | | | | | 0 | 5 |
| 6 | 6 | 62 | 62 | 26 | 64 | 10 | 16 | 10 | 2 | 8 | 46 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 20 | 62 | 62 | 31 | 26 | 20 | 92 | 12 | 15 | 7 | 30 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 6 | 62 | 15 | 26 | 62 | 25 | 26 | 13 | 16 | 10 | 26 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 18 | 62 | 62 | 48 | 15 | 15 | 26 | 10 | 16 | 6 | 21 | 40 | 0 | 784 | 22 | 6 | 2 | 6 | 15 | 5 | 18 | 2 | 11 | 2 | 224 | 50 | 5 | 76 | 4 | | | 8 | 2 |
| 8 | 8 | 62 | 53 | 29 | 62 | 13 | 15 | 11 | 26 | 10 | 37 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 22 | 62 | 70 | 33 | 23 | 19 | 64 | 9 | 27 | 6 | 33 | 0 | 0 | 70 | 15 | 3 | 2 | 3 | 22 | 1 | | | | | 0 | | | | | | | 6 | 0 |
| 9 | 5 | 62 | 26 | 18 | 64 | 15 | 53 | 13 | 23 | 9 | 45 | 0 | 0 | 87 | 20 | 4 | 2 | 3 | | | | | | | 6 | 76 | 1 | 50 | 1 | | | 2 | 1 |
| 9 | 19 | 62 | 26 | 37 | 64 | 8 | 82 | 7 | 16 | 6 | 42 | 0 | 0 | 6 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

## ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** VIRGINIA

**MAJOR BASIN** NORTH ATLANTIC

**MINOR BASIN** POTOMAC RIVER

**STATION LOCATION** SHENANDOAH RIVER AT
BERRYVILLE, VIRGINIA

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | L |
| 11 | 2 | 61 | 11 | 21 | 5760 | 143 | 78 | 65 | 2 | 30 | 23 | 4 | 3 | 16 | 0 | 2 | 2 | 2 | |
| 12 | 5 | 61 | 12 | 18 | 4000 | 259 | 154 | 105 | 5 | 89 | 25 | 2 | 2 | 21 | 0 | 5 | 3 | 9 | |
| 1 | 3 | 62 | 1 | 9 | 3780 | 175 | 73 | 102 | 6 | 28 | 18 | 3 | 2 | 12 | 1 | 4 | 2 | 3 | |
| 1 | 30 | 62 | 2 | 6 | 4282 | 185 | 93 | 92 | 6 | 45 | 19 | 2 | 1 | 15 | 1 | 4 | 2 | 7 | |
| 2 | 27 | 62 | 3 | 12 | 2787 | 152 | 55 | 97 | 4 | 16 | 16 | 3 | 1 | 12 | 0 | 5 | 2 | 1 | |
| 3 | 27 | 62 | 4 | 3 | 2233 | 150 | 52 | 98 | 5 | 17 | 15 | 3 | 1 | 10 | 1 | 4 | 2 | 2 | |
| 4 | 24 | 62 | 5 | 1 | 852 | 224 | 82 | 142 | 7 | 31 | 21 | 5 | 2 | 14 | 0 | 5 | 3 | 4 | |
| 5 | 22 | 62 | 5 | 31 | 3918 | 134 | 65 | 69 | 8 | 25 | 18 | 2 | 1 | 13 | 2 | 5 | 3 | 1 | |
| 6 | 27 | 62 | 7 | 5 | 5043 | 157 | 100 | 57 | 2 | 26 | 28 | 3 | 2 | 22 | 1 | 6 | 2 | 3 | |
| 7 | 25 | 62 | 8 | 3 | 2121 | 196 | 117 | 79 | 5 | 40 | 39 | 6 | 2 | 30 | 1 | 8 | 4 | 4 | |
| 8 | 7 | 62 | 8 | 15 | 4548 | 191 | 122 | 69 | 3 | 50 | 23 | 3 | 2 | 16 | 2 | 7 | 3 | 6 | |
| 8 | 29 | 62 | 9 | 5 | 1765 | 449 | 286 | 163 | 9 | 80 | 54 | 4 | 4 | 41 | 5 | 17 | 6 | 9 | |
| 9 | 26 | 62 | 10 | 3 | 3597 | 282 | 200 | 82 | 6 | 126 | 30 | 4 | 2 | 24 | 0 | 8 | 4 | 10 | |

NATIONAL WATER QUALITY NETWORK

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE VIRGINIA
MAJOR BASIN NORTH ATLANTIC
MINOR BASIN POTOMAC RIVER
STATION LOCATION SHENANDOAH RIVER AT
BERRYVILLE, VIRGINIA 87

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 20.2 | 5.7 | 8.4 | - | - | - | - | - | 10 | 128 | 160 | 5 | 22 | - | - | 250 | - |
| 10 | 9 | 61 | 19.0 | 7.9 | 8.4 | - | - | - | - | - | 9 | 136 | 160 | 5 | 22 | - | - | 232 | 4700 |
| 10 | 16 | 61 | 16.0 | 8.5 | 8.4 | - | - | - | - | - | 13 | 140 | 180 | 5 | 9 | - | - | 246 | 7100 |
| 10 | 23 | 61 | 16.3 | - | 8.1 | - | - | - | - | - | 4 | 82 | 112 | 15 | 450 | - | - | 144 | 23000 |
| 10 | 30 | 61 | 14.0 | 8.7 | 8.0 | - | - | - | - | - | 4 | 100 | 136 | 5 | 15 | - | - | 180 | - |
| 11 | 7 | 61 | 17.0 | 7.5 | 8.3 | - | - | - | - | - | 7 | 126 | 168 | 5 | 9 | 48 | - | - | 330 |
| 11 | 14 | 61 | 15.0 | 9.5 | 8.6 | - | - | - | - | - | 7 | 140 | 176 | 5 | 15 | - | - | 234 | *40 |
| 11 | 21 | 61 | 14.0 | 10.0 | 8.7 | - | - | - | - | - | 6 | 124 | 152 | 2 | 7 | - | - | 246 | *18 |
| 11 | 28 | 61 | 9.0 | 10.2 | 9.0 | - | - | - | - | - | 9 | 132 | 176 | 5 | 22 | 60 | .1 | 210 | 33 |
| 12 | 5 | 61 | 10.8 | 11.4 | 8.8 | - | - | 1.3 | 2.6 | - | 7 | 120 | 150 | 2 | 10 | 49 | .0 | 206 | 12 |
| 12 | 11 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 15 |
| 12 | 12 | 61 | 8.0 | 11.2 | 9.1 | - | 7 | .8 | 2.4 | - | 9 | 116 | 152 | 2 | 3 | 52 | .1 | 200 | - |
| 12 | 19 | 61 | 6.0 | 11.7 | 8.2 | - | - | 1.6 | 8.5 | - | 6 | 72 | 120 | 3 | 125 | - | - | 132 | - |
| 12 | 27 | 61 | 5.5 | 13.1 | 8.3 | - | - | 2.0 | 2.9 | - | 5 | 82 | 102 | 5 | 9 | 27 | .0 | 130 | 250 |
| 1 | 3 | 62 | 3.0 | 13.6 | 8.5 | - | - | - | - | - | 5 | 116 | 142 | 2 | 12 | - | - | 192 | 18 |
| 1 | 9 | 62 | 7.8 | 11.8 | 8.2 | - | 36 | .2 | - | - | 6 | 86 | 110 | 8 | 550 | - | - | 134 | 20 |
| 1 | 16 | 62 | 2.0 | 13.6 | 8.3 | - | - | .7 | 5.6 | - | 5 | 96 | 120 | 5 | 130 | 25 | - | 142 | *1 |
| 1 | 23 | 62 | 3.5 | 13.2 | 8.4 | - | - | 1.7 | 3.1 | - | 7 | 102 | 130 | 2 | 20 | 31 | - | 162 | 4 |
| 1 | 30 | 62 | 3.6 | 13.0 | 8.5 | - | - | 1.1 | 2.7 | - | 6 | 116 | 140 | 5 | 15 | 34 | - | 178 | 5 |
| 2 | 6 | 62 | 2.0 | 13.4 | 8.6 | - | 7 | .9 | 2.5 | - | 9 | 115 | 146 | 2 | 15 | - | - | 194 | 1 |
| 2 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 30 | - | - | - |
| 2 | 13 | 62 | 4.0 | - | 8.7 | - | - | .5 | 2.6 | - | 11 | 120 | 149 | 5 | 9 | 55 | - | 194 | 78 |
| 2 | 20 | 62 | 4.8 | - | 8.0 | - | - | 2.1 | 2.2 | - | 11 | 122 | 154 | 5 | 20 | - | - | 198 | - |
| 2 | 27 | 62 | 6.5 | 10.8 | 8.2 | 2.7 | - | 4.4 | - | - | 6 | 86 | 118 | 5 | 280 | - | - | 146 | 190 |
| 3 | 13 | 62 | 4.5 | 12.6 | 8.0 | 5.0 | 28 | 2.7 | - | - | - | 65 | 92 | 15 | 230 | - | - | - | - |
| 3 | 20 | 62 | 7.0 | 11.8 | 8.1 | .8 | - | 2.4 | - | - | 8 | 72 | 96 | 7 | 50 | - | - | 120 | 170 |
| 3 | 27 | 62 | 7.5 | 10.7 | 7.9 | .2 | - | 1.8 | 5.4 | - | 3 | 70 | 92 | 5 | 75 | - | - | 122 | 61 |
| 4 | 3 | 62 | 12.0 | 10.2 | 8.0 | 2.3 | 49 | 4.5 | 10.5 | - | 4 | 92 | 118 | 5 | 365 | 22 | - | 120 | *24 |
| 4 | 10 | 62 | 12.5 | 9.8 | 8.0 | .9 | - | 2.6 | 6.1 | - | 2 | 82 | 106 | 5 | 100 | 17 | - | 128 | 48 |
| 4 | 17 | 62 | 8.5 | 11.2 | 8.1 | .6 | - | 1.5 | 4.5 | - | 3 | 72 | 92 | 3 | 50 | - | - | 121 | 5 |
| 4 | 24 | 62 | 13.0 | 10.0 | 8.4 | - | - | 1.1 | 2.6 | - | 7 | 100 | 116 | 2 | 25 | 26 | .0 | 150 | *1 |
| 5 | 1 | 62 | 20.0 | - | 8.7 | - | 13 | .8 | 3.5 | - | 6 | 112 | 132 | 5 | 40 | 29 | - | 160 | - |
| 5 | 8 | 62 | 17.8 | 8.9 | 8.6 | - | - | 1.5 | 3.5 | - | 4 | 92 | 110 | 5 | 25 | 27 | - | 136 | *1 |
| 5 | 11 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *1 |
| 5 | 15 | 62 | 18.0 | 9.2 | 9.0 | - | - | 1.2 | 4.0 | - | 4 | 108 | 128 | 5 | 28 | - | - | 160 | 13 |
| 5 | 23 | 62 | 23.8 | 7.4 | 8.7 | 1.2 | - | 1.3 | 4.4 | - | - | 106 | 128 | - | 30 | - | - | - | 25 |
| 5 | 31 | 62 | 21.8 | 6.3 | 8.0 | 3.6 | 33 | 6.8 | - | - | - | 100 | 132 | - | 270 | - | - | - | - |
| 6 | 6 | 62 | 22.0 | 7.3 | 8.4 | 1.4 | - | 1.8 | - | - | 7 | 120 | 132 | 10 | 25 | 28 | .1 | 163 | - |
| 6 | 13 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 38 | - | 200 | *7 |

**STATION LOCATION** SHENANDOAH RIVER AT
BERRYVILLE, VIRGINIA

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOT DISSO SOLI mg |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | |
| 6 | 20 | 62 | 24.8 | 6.6 | 8.3 | 3.8 | - | 3.1 | 8.1 | - | 8 | 116 | 152 | 10 | 25 | 34 | .1 | 1 |
| 6 | 27 | 62 | 24.5 | 7.7 | 8.3 | 2.7 | - | .6 | 8.1 | - | 8 | 120 | 144 | 10 | - | 32 | - | 1 |
| 7 | 6 | 62 | 22.5 | 8.1 | 8.1 | - | 24 | 3.6 | - | - | - | - | - | - | - | - | - | |
| 7 | 13 | 62 | 23.3 | 6.0 | 7.9 | 2.8 | - | 2.6 | 6.9 | - | 10 | 124 | 144 | 10 | - | 39 | .0 | 1 |
| 7 | 25 | 62 | - | - | 8.7 | - | - | - | - | - | - | - | - | - | - | - | - | |
| 8 | 1 | 62 | - | - | - | - | - | - | - | - | 9 | 128 | 140 | - | - | 18 | .2 | 1 |
| 8 | 8 | 62 | 25.5 | 7.7 | 8.6 | 6.7 | - | 2.6 | 9.7 | - | 13 | 138 | 172 | - | - | 58 | .0 | 2 |
| 8 | 15 | 62 | 24.5 | 12.6 | 8.5 | 5.6 | - | 3.1 | 12.3 | - | 20 | 104 | 180 | 5 | - | 47 | .0 | 2 |
| 8 | 22 | 62 | 25.0 | 7.7 | 8.6 | 3.7 | - | 1.8 | 8.3 | - | 10 | 136 | 164 | 10 | - | 54 | .0 | 2 |
| 8 | 29 | 62 | - | - | 8.6 | - | - | 1.6 | 7.2 | - | 13 | 144 | 168 | 10 | - | 64 | .0 | 2 |
| 9 | 5 | 62 | - | - | 8.2 | - | - | 2.8 | 8.5 | - | 18 | 104 | 172 | 5 | 65 | 64 | .1 | 2 |
| 9 | 12 | 62 | 22.0 | 7.7 | 8.5 | 4.7 | - | 1.9 | 9.1 | - | 16 | 124 | 160 | 10 | 25 | 66 | .1 | 2 |
| 9 | 19 | 62 | 19.4 | 8.5 | 8.8 | 6.0 | - | 1.7 | 5.4 | - | 16 | 124 | 160 | 10 | 25 | 66 | .0 | 2 |
| 9 | 26 | 62 | - | - | 8.6 | - | - | 1.3 | 4.5 | - | - | - | - | - | - | - | - | |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Millville, West Virginia
Operated by U.S. Geological Survey

STATE Virginia
MAJOR BASIN North Atlantic
MINOR BASIN Potomac River
STATION LOCATION Shenandoah River at Berryville, Virginia

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .534 | 1.040 | 1.310 | 2.120 | 1.670 | 10.900 | 5.450 | 2.460 | 1.810 | 1.210 | .706 | .548 |
| 2 | .528 | .990 | 1.220 | 2.050 | 1.660 | 8.590 | 7.430 | 3.070 | 1.760 | 1.080 | .698 | .509 |
| 3 | .554 | .990 | 1.090 | 1.890 | 1.620 | 6.650 | 8.140 | 4.980 | 1.790 | 1.160 | .706 | .554 |
| 4 | .574 | .936 | 1.060 | 1.860 | 1.600 | 5.410 | 7.020 | 5.110 | 1.600 | 1.280 | .730 | .580 |
| 5 | .554 | .909 | 1.040 | 1.840 | 1.590 | 4.670 | 6.040 | 4.310 | 2.660 | 1.400 | .658 | .629 |
| 6 | .560 | .972 | .972 | 2.000 | 1.350 | 4.570 | 5.360 | 3.540 | 2.540 | 1.420 | .666 | .658 |
| 7 | .580 | 1.080 | .909 | 4.090 | 1.400 | 4.290 | 5.050 | 3.120 | 2.100 | 1.590 | .698 | .666 |
| 8 | .580 | 1.190 | .945 | 10:600 | 1.500 | 3.950 | 5.490 | 2.860 | 2.010 | 1.510 | .762 | .706 |
| 9 | .580 | 1.150 | .909 | 10.100 | 1.460 | 3.610 | 7.110 | 2.640 | 1.790 | 1.180 | .865 | .572 |
| 10 | .554 | 1.760 | .927 | 6.890 | 1.390 | 3.360 | 8.060 | 2.480 | 1.500 | 1.140 | .794 | .560 |
| 11 | .534 | 1.540 | .954 | 5.090 | 1.350 | 3.310 | 7.230 | 2.410 | 1.410 | 1.310 | .722 | .504 |
| 12 | .522 | 1.290 | 1.040 | 3.950 | 1.370 | 4.580 | 6.530 | 2.280 | 1.430 | 1.360 | .828 | .448 |
| 13 | .503 | 1.230 | 1.780 | 3.250 | 1.380 | 14.000 | 7.890 | 2.190 | 1.540 | 1.200 | .945 | .528 |
| 14 | .528 | 1.200 | 3.650 | 3.080 | 1.370 | 25.000 | 9.450 | 2.180 | 3.180 | 1.060 | .738 | .572 |
| 15 | .515 | 1.090 | 3.970 | 2.900 | 1.400 | 21.000 | 8.820 | 2.220 | 2.980 | .999 | .690 | .467 |
| 16 | .528 | 1.080 | 2.980 | 2.900 | 1.450 | 16.300 | 7.470 | 2.320 | 2.880 | 1.110 | .636 | .440 |
| 17 | .522 | 1.040 | 2.500 | 2.910 | 1.460 | 13.900 | 6.400 | 2.200 | 2.390 | 1.090 | .629 | .473 |
| 18 | .503 | 1.030 | 2.480 | 3.140 | 1.500 | 12.800 | 5.560 | 2.240 | 2.070 | 1.010 | .706 | .485 |
| 19 | .509 | .999 | 5.490 | 2.700 | 1.520 | 11.700 | 4.940 | 2.460 | 1.600 | 1.160 | .690 | .497 |
| 20 | .503 | .945 | 9.570 | 2.500 | 1.580 | 10.600 | 4.550 | 2.240 | 1.760 | 1.090 | .629 | .509 |
| 21 | .528 | .945 | 6.710 | 2.350 | 1.730 | 11.800 | 4.290 | 2.050 | 1.880 | .990 | .682 | .503 |
| 22 | 2.320 | 1.100 | 4.960 | 2.250 | 2.160 | 21.900 | 3.990 | 2.050 | 2.740 | .936 | .615 | .515 |
| 23 | 9.920 | .936 | 3.890 | 2.180 | 2.030 | 26.800 | 3.630 | 2.150 | 2.310 | .855 | .594 | .515 |
| 24 | 4.660 | .999 | 3.330 | 2.150 | 2.110 | 17.800 | 3.330 | 2.110 | 2.020 | .927 | .601 | .491 |
| 25 | 2.960 | 1.040 | 2.880 | 2.090 | 2.830 | 12.800 | 3.090 | 1.850 | 1.520 | .846 | .650 | .515 |
| 26 | 2.160 | 1.010 | 2.600 | 2.100 | 3.160 | 10.400 | 2.910 | 1.670 | 2.060 | .837 | .682 | .497 |
| 27 | 1.790 | 1.290 | 2.320 | 2.020 | 7.030 | 8.650 | 2.770 | 1.920 | 1.740 | .802 | .615 | .528 |
| 28 | 1.540 | 1.660 | 2.190 | 1.900 | 10.400 | 7.460 | 2.640 | 2.970 | 1.340 | .778 | .587 | .534 |
| 29 | 1.360 | 1.540 | 2.220 | 1.860 |  | 6.510 | 2.520 | 2.540 | 1.390 | .714 | .567 | .522 |
| 30 | 1.220 | 1.400 | 2.250 | 1.790 |  | 5.820 | 2.450 | 2.180 | 1.390 | .978 | .509 | .548 |
| 31 | 1.100 |  | 2.280 | 1.730 |  | 5.340 |  | 2.010 |  | .690 | .491 |  |

**STATION LOCATION** SHIP CREEK AT

ANCHORAGE, ALASKA 110

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 6 | 7 | 62 | 1400 | 0 | 0 | 20 | 0 | 0 | 20 | 230 | 1160 | 60 | 80 | 82 | 2 | 73 | 1 | | | | | | | | | | | | | | | | |
| 7 | 6 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 7 | 19 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 6 | 7 | 62 | 37 | 23 | 16 | 9 | 2 | 9 | 92 | 8 | 51 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 6 | 62 | 37 | 19 | 92 | 16 | 2 | 6 | 14 | 5 | 54 | 0 | 0 | 2 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 19 | 62 | 14 | 33 | 92 | 25 | 31 | 9 | 37 | 7 | 26 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** ALASKA

**MAJOR BASIN** ALASKA

**MINOR BASIN** NORTH PACIFIC OCEAN

**STATION LOCATION** SHIP CREEK AT

ANCHORAGE, ALASKA 1

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 11 | 10 | 61 | 12 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 3 | 9 | 12 | 10 | 15 | 13 | | | | | | |
| 11 | 10 | 61 | 12 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 4 | 4 | 5 | 7 | 6 | | | | | | |
| 3 | 21 | 62 | 4 | 3 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 4 | 6 | 4 | 8 | 6 | | | | | | |
| 4 | 5 | 62 | 5 | 1 | 3 | 6 | 0 | 2 | 3 | 6 | 63 | 15 | 0 | 7 | 63 | 17 | | | | | | |
| 6 | 7 | 62 | 7 | 9 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 5 | 4 | 5 | 6 | 7 | | | | | | |
| 6 | 21 | 62 | 8 | 3 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 7 | 2 | 7 | 2 | 10 | | | | | | |
| 7 | 5 | 62 | 8 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 6 | 3 | 7 | 4 | | | | | | |
| 7 | 19 | 62 | 8 | 21 | 1 | 1 | 0 | 1 | 1 | 1 | 3 | 5 | 10 | 6 | 13 | 7 | | | | | | |
| 8 | 2 | 62 | 9 | 19 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 6 | 6 | 7 | 8 | 9 | | | | | | |
| 8 | 16 | 62 | 9 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 5 | 5 | 6 | 9 | 7 | | | | | | |

**MINOR BASIN** NORTH PACIFIC OCEAN

**STATION LOCATION** SHIP CREEK AT

ANCHORAGE, ALASKA

| DATE OF SAMPLE MONTH | DATE OF SAMPLE DAY | DATE OF SAMPLE YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 7 | 62 | - | - | 8.0 | - | - | - | - | - | 5 | 42 | 80 | 10 | *25 | 20 | .0 | - | - |
| 6 | 21 | 62 | - | - | 7.8 | - | - | - | - | - | 4 | 32 | 48 | 5 | *25 | 20 | .0 | - | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Anchorage, Alaska
Operated by U.S. Geological Survey

| | |
|---|---|
| STATE | Alaska |
| MAJOR BASIN | Alaska |
| MINOR BASIN | North Pacific Ocean |
| STATION LOCATION | Ship Creek at<br>Anchorage, Alaska |

| Day | October | November | December | January | February | March | April | May | June | July | August | Septe |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .560 | .100 | .061 | .027 | .033 | .019 | .024 | .026 | .320 | .660 | .186 | |
| 2 | .576 | .100 | .060 | .028 | .032 | .019 | .023 | .030 | .320 | .600 | .180 | |
| 3 | .540 | .098 | .059 | .029 | .031 | .018 | .028 | .035 | .320 | .552 | .178 | |
| 4 | .484 | .096 | .059 | .031 | .030 | .018 | .027 | .038 | .340 | .540 | .180 | |
| 5 | .423 | .096 | .058 | .034 | .029 | .018 | .026 | .044 | .320 | .572 | .165 | |
| 6 | .386 | .097 | .058 | .008 | .028 | .018 | .026 | .053 | .330 | .568 | .155 | |
| 7 | .366 | .098 | .058 | .034 | .028 | .018 | .026 | .062 | .380 | .552 | .153 | |
| 8 | .346 | .099 | .058 | .034 | .028 | .019 | .026 | .077 | .360 | .498 | .159 | |
| 9 | .295 | .100 | .058 | .034 | .028 | .019 | .025 | .126 | .410 | .480 | .153 | |
| 10 | .254 | .100 | .058 | .034 | .027 | .020 | .024 | .108 | .460 | .452 | .143 | |
| 11 | .234 | .100 | .059 | .034 | .026 | .020 | .019 | .128 | .600 | .396 | .141 | |
| 12 | .267 | .110 | .060 | .034 | .025 | .019 | .018 | .110 | .800 | .346 | .139 | |
| 13 | .254 | .110 | .060 | .033 | .024 | .019 | .019 | .108 | 1.200 | .310 | .139 | |
| 14 | .238 | .110 | .061 | .033 | .024 | .018 | .019 | .096 | 1.000 | .295 | .141 | |
| 15 | .226 | .110 | .060 | .032 | .024 | .018 | .019 | .101 | .850 | .280 | .137 | |
| 16 | .217 | .110 | .058 | .032 | .025 | .017 | .018 | .115 | .940 | .259 | .132 | |
| 17 | .215 | .110 | .054 | .032 | .025 | .017 | .020 | .128 | 1.000 | .261 | .126 | |
| 18 | .199 | .100 | .050 | .032 | .025 | .017 | .020 | .117 | 1.100 | .267 | .124 | |
| 19 | .195 | .094 | .047 | .032 | .025 | .014 | .020 | .117 | .880 | .264 | .124 | |
| 20 | .195 | .087 | .045 | .033 | .026 | .018 | .023 | .134 | .900 | .275 | .134 | |
| 21 | .197 | .082 | .042 | .033 | .021 | .018 | .026 | .165 | .920 | .270 | .130 | |
| 22 | .184 | .075 | .039 | .034 | .021 | .018 | .030 | .160 | .980 | .248 | .126 | |
| 23 | .178 | .075 | .037 | .034 | .022 | .018 | .030 | .157 | .850 | .229 | .124 | |
| 24 | .153 | .072 | .036 | .035 | .014 | .018 | .036 | .182 | .680 | .213 | .121 | |
| 25 | .153 | .071 | .034 | .035 | .017 | .018 | .037 | .201 | .650 | .224 | .122 | |
| 26 | .155 | .070 | .033 | .023 | .021 | .018 | .035 | .256 | .628 | .213 | .153 | |
| 27 | .136 | .068 | .031 | .010 | .020 | .019 | .032 | .264 | .600 | .201 | .157 | |
| 28 | .147 | .065 | .029 | .025 | .019 | .020 | .029 | .236 | .664 | .199 | .161 | |
| 29 | .139 | .063 | .028 | .020 | | .021 | .024 | .240 | .636 | .206 | .195 | |
| 30 | .108 | .062 | .027 | .025 | | .022 | .023 | .256 | .664 | .204 | .201 | |
| 31 | .103 | | .027 | .030 | | .023 | | .290 | | .197 | .176 | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** WASHINGTON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** MIDDLE AND LOWER SNAKE RIVER
**STATION LOCATION** SNAKE RIVER AT
ICE HARBOR DAM, WASHINGTON 115

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 5 | 25 | 62 | 6 | 29 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 7 | 10 | 6 | 12 | 9 | | | | | | |
| 6 | 5 | 62 | 7 | 5 | 0 | 0 | 1 | 1 | 1 | 1 | 6 | 5 | 20 | 6 | 26 | 7 | | | | | | |
| 6 | 11 | 62 | 7 | 13 | 1 | 1 | 0 | 0 | 1 | 1 | 3 | 5 | 9 | 6 | 12 | 7 | | | | | | |
| 6 | 18 | 62 | 7 | 18 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 5 | 10 | 6 | 14 | 7 | | | | | | |
| 6 | 25 | 62 | 7 | 25 | 0 | 1 | 0 | 0 | 0 | 1 | 4 | 6 | 10 | 5 | 14 | 7 | | | | | | |
| 7 | 23 | 62 | 8 | 21 | 0 | 0 | 1 | 1 | 1 | 1 | 3 | 5 | 18 | 6 | 21 | 7 | | | | | | |
| 8 | 7 | 62 | 8 | 27 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 3 | 6 | 3 | 8 | 4 | | | | | | |
| 8 | 13 | 62 | 8 | 31 | 0 | 0 | 1 | 1 | 1 | 1 | 4 | 5 | 9 | 7 | 13 | 9 | | | | | | |
| 8 | 20 | 62 | 9 | 6 | 0 | 0 | 2 | 1 | 2 | 1 | 2 | 5 | 15 | 7 | 17 | 9 | | | | | | |
| 8 | 27 | 62 | 9 | 14 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 6 | 7 | 8 | 7 | 10 | | | | | | |
| 9 | 5 | 62 | 9 | 24 | 1 | 1 | 3 | 1 | 4 | 1 | 1 | 4 | 23 | 7 | 24 | 8 | | | | | | |
| 9 | 10 | 62 | 10 | 3 | 0 | 0 | 2 | 1 | 2 | 1 | 3 | 6 | 8 | 7 | 11 | 9 | | | | | | |
| 9 | 17 | 62 | 10 | 16 | 0 | 0 | 1 | 1 | 1 | 1 | 3 | 5 | 13 | 7 | 16 | 8 | | | | | | |
| 9 | 25 | 62 | 10 | 23 | 0 | 0 | 2 | 1 | 2 | 1 | 3 | 5 | 16 | 7 | 19 | 9 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

## PLANKTON POPULATION

**STATE** WASHINGTON

**MAJOR BASIN** PACIFIC NORTHWEST

**MINOR BASIN** MIDDLE AND LOWER SNAKE RIVER

**STATION LOCATION** SNAKE RIVER AT
ICE·HARBOR DAM, WASHINGTON

| DATE OF SAMPLE | | | ALGAE (Number per milliliter) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Coc | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | |
| MONTH | DAY | YEAR | TOTAL | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 5 | 25 | 62 | 1200 | 0 | 0 | 20 | 0 | 0 | 0 | 700 | 440 | 40 | 420 | 71 | 3 | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 1200 | 0 | 0 | 40 | 0 | 40 | 0 | 560 | 580 | 40 | 150 | 71 | 2 | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 800 | 0 | 0 | 0 | 0 | 0 | 0 | 720 | 130 | 170 | 420 | 71 | 3 | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 700 | 20 | 0 | 90 | 0 | 0 | 0 | 410 | 200 | 1060 | 110 | 71 | 1 | 68 | 1 | | | | | | | | | | | | | | |
| 8 | 14 | 62 | 1900 | 0 | 0 | 0 | 0 | 0 | 0 | 1140 | 800 | 970 | 760 | 71 | 2 | 68 | 2 | 92 | 1 | | | | | | | | | | | | |
| 8 | 20 | 62 | 1100 | 80 | 0 | 130 | 0 | 0 | 0 | 590 | 300 | 420 | 80 | 69 | 2 | 71 | 1 | 84 | 1 | | | | | | | | | | | | |
| 9 | 4 | 62 | 1000 | 80 | 0 | 230 | 0 | 100 | 150 | 210 | 250 | 40 | 250 | 92 | 1 | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 400 | 0 | 0 | 220 | 0 | 20 | 0 | 40 | 80 | 40 | 190 | 26 | 1 | | | | | | | | | | | | | | | | |

NATIONAL WATER QUALITY NETWORK

# PLANKTON POPULATION

**STATE** WASHINGTON

**MAJOR BASIN** PACIFIC NORTHWEST

**MINOR BASIN** MIDDLE AND LOWER SNAKE RIVER

**STATION LOCATION** SNAKE RIVER AT
ICE HARBOR DAM, WASHINGTON 115

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA *(Identifiable) Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 5 | 25 | 62 | 80 | 57 | 58 | 4 | 92 | 4 | 14 | 3 | 32 | 60 | 0 | 5 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 80 | 54 | 36 | 13 | 92 | 8 | 14 | 4 | 21 | 0 | 0 | 8 | 11 | 1 | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 80 | 35 | 56 | 17 | 47 | 9 | 36 | 4 | 35 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 30 | 24 | 56 | 22 | 80 | 16 | 26 | 11 | 27 | 0 | 0 | 10 | 21 | 1 | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 8 | 14 | 62 | 58 | 28 | 47 | 18 | 80 | 17 | 26 | 12 | 25 | 0 | 0 | 89 | 17 | 4 | 16 | 3 | | | | | | | 12 | 51 | 3 | | | | | 0 | 0 |
| 8 | 20 | 62 | 58 | 57 | 47 | 26 | 80 | 11 | 92 | 4 | 2 | 0 | 0 | 105 | 22 | 3 | 16 | 3 | 17 | 3 | 18 | 1 | | | 37 | 53 | 3 | 76 | 3 | 51 | 2 | 0 | 0 |
| 9 | 4 | 62 | 58 | 25 | 92 | 25 | 47 | 25 | 26 | 10 | 15 | 0 | 0 | 27 | 17 | 2 | 11 | 1 | | | | | | | 12 | 50 | 3 | | | | | 0 | 0 |
| 9 | 17 | 62 | 92 | 46 | 58 | 13 | 47 | 13 | 56 | 7 | 21 | 0 | 0 | 28 | 11 | 2 | 16 | 1 | | | | | | | 9 | 50 | 2 | 76 | 1 | | | 0 | 0 |

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATION LOCATION** SNAKE RIVER AT
ICE HARBOR DAM, WASHINGTON 11

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 6 | 5 | 62 | 6 | 13 | 4988 | 110 | 49 | 61 | 1 | 12 | 14 | 1 | 1 | 11 | 1 | 5 | 3 | 1 | 13 |
| 7 | 12 | 62 | 7 | 18 | 4753 | 92 | 33 | 59 | 1 | 8 | 11 | 1 | 1 | 9 | 0 | 3 | 2 | 0 | 8 |
| 8 | 6 | 62 | 8 | 13 | 4862 | 126 | 58 | 68 | 1 | 14 | 15 | 1 | 1 | 13 | 0 | 6 | 3 | 1 | 18 |
| 9 | 3 | 62 | 9 | 10 | 4424 | 106 | 34 | 72 | 1 | 10 | 13 | 1 | 1 | 10 | 1 | 4 | 2 | 1 | 3 |

NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** WASHINGTON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** MIDDLE AND LOWER SNAKE RIVER
**STATION LOCATION** SNAKE RIVER AT
ICE HARBOR DAM, WASHINGTON 115

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 5 | 25 | 62 | - | - | - | - | - | - | - | - | - | - | - | 10 | 25 | 8 | - | - | - |
| 7 | 16 | 62 | - | - | - | - | 13 | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 30 | 62 | - | - | - | - | - | - | - | - | 6 | 56 | 56 | 5 | 25 | 16 | .0 | 83 | - |
| 8 | 7 | 62 | - | - | - | - | - | - | - | - | 6 | 72 | 24 | 5 | 25 | 20 | .0 | 130 | - |
| 8 | 13 | 62 | - | - | - | - | 22 | - | - | - | 7 | 76 | 80 | 5 | - | 25 | .0 | 142 | - |
| 8 | 20 | 62 | - | - | - | - | - | - | - | - | 9 | 84 | 80 | 5 | - | 30 | .1 | 152 | - |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | 9 | 90 | 88 | 0 | - | 31 | .0 | 128 | - |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | 14 | 100 | 104 | 5 | 25 | 37 | .0 | 175 | - |
| 9 | 10 | 62 | - | - | - | - | - | - | - | - | 14 | 100 | 96 | 5 | 25 | 37 | .0 | 188 | - |
| 9 | 17 | 62 | - | - | - | - | - | - | - | - | 17 | 112 | 104 | 10 | *25 | 42 | .0 | 208 | - |
| 9 | 25 | 62 | - | - | - | - | - | - | - | - | 20 | 88 | 204 | 5 | 25 | 165 | .1 | 425 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Clarkston, Washington
Operated by U.S. Geological Survey

| | |
|---|---|
| STATE | Washington |
| MAJOR BASIN | Pacific Northwest |
| MINOR BASIN | Middle and Lower Snake River |
| STATION LOCATION | Snake River at<br>Ice Harbor Dam, Washington |

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 19.900 | 22.300 | 26.000 | 25.400 | 28.000 | 34.700 | 52.500 | 78.600 | 116.000 | 59.700 | 25.200 | 21.200 |
| 2 | 19.100 | 22.500 | 28.600 | 23.500 | 30.000 | 34.100 | 58.500 | 74.900 | 120.000 | 56.500 | 25.500 | 22.000 |
| 3 | 18.800 | 23.500 | 28.000 | 26.400 | 30.000 | 31.700 | 63.700 | 77.600 | 122.000 | 51.800 | 24.200 | 19.200 |
| 4 | 18.500 | 22.700 | 28.200 | 26.400 | 27.600 | 27.300 | 66.800 | 81.800 | 126.000 | 47.400 | 23.600 | 18.900 |
| 5 | 18.000 | 22.700 | 29.000 | 27.600 | 27.000 | 25.000 | 76.500 | 87.000 | 114.000 | 45.400 | 23.800 | 21.600 |
| 6 | 18.500 | 22.200 | 30.000 | 26.000 | 29.900 | 30.000 | 89.200 | 86.800 | 107.000 | 43.500 | 23.200 | 20.300 |
| 7 | 19.000 | 21.300 | 28.900 | 27.700 | 31.000 | 28.100 | 117.000 | 87.500 | 95.800 | 42.300 | 23.100 | 20.500 |
| 8 | 19.500 | 21.800 | 28.400 | 45.800 | 31.700 | 27.100 | 118.000 | 93.700 | 85.000 | 40.200 | 26.600 | 19.200 |
| 9 | 19.900 | 21.500 | 28.000 | 66.800 | 30.700 | 26.900 | 95.600 | 108.000 | 87.100 | 35.400 | 28.200 | 18.600 |
| 10 | 19.200 | 22.000 | 25.900 | 50.900 | 31.000 | 30.300 | 81.600 | 121.000 | 95.600 | 34.200 | 28.300 | 17.600 |
| 11 | 22.000 | 22.400 | 22.000 | 41.800 | 29.000 | 25.300 | 71.000 | 124.000 | 99.300 | 35.000 | 27.000 | 19.500 |
| 12 | 24.100 | 22.800 | 23.600 | 38.000 | 31.500 | 23.600 | 61.000 | 119.000 | 106.000 | 34.600 | 24.600 | 19.800 |
| 13 | 23.300 | 22.400 | 21.700 | 37.300 | 34.200 | 26.900 | 59.000 | 117.000 | 107.000 | 30.600 | 21.800 | 23.900 |
| 14 | 25.800 | 22.400 | 22.800 | 32.400 | 35.300 | 26.500 | 62.800 | 114.000 | 108.000 | 31.800 | 23.100 | 21.100 |
| 15 | 25.700 | 21.900 | 23.900 | 30.100 | 37.800 | 28.600 | 73.600 | 107.000 | 108.000 | 32.700 | 23.400 | 20.500 |
| 16 | 23.500 | 21.700 | 23.700 | 30.700 | 40.000 | 28.100 | 83.000 | 100.000 | 103.000 | 32.400 | 23.000 | 18.800 |
| 17 | 23.600 | 20.700 | 20.900 | 32.500 | 40.400 | 29.500 | 88.000 | 91.000 | 101.000 | 31.500 | 20.500 | 18.900 |
| 18 | 23.500 | 20.100 | 21.000 | 30.400 | 42.200 | 26.700 | 95.600 | 91.900 | 102.000 | 29.700 | 20.400 | 20.200 |
| 19 | 23.200 | 18.800 | 20.900 | 30.600 | 42.600 | 27.000 | 107.000 | 95.300 | 102.000 | 29.100 | 18.900 | 22.200 |
| 20 | 22.900 | 18.800 | 21.200 | 28.300 | 44.400 | 33.700 | 126.000 | 96.000 | 100.000 | 29.000 | 18.900 | 20.800 |
| 21 | 23.000 | 20.800 | 22.200 | 26.800 | 46.800 | 35.100 | 132.000 | 91.800 | 97.700 | 28.800 | 19.200 | 20.500 |
| 22 | 22.300 | 22.500 | 26.800 | 24.000 | 47.600 | 37.300 | 115.000 | 88.900 | 95.600 | 26.600 | 19.800 | 19.400 |
| 23 | 21.800 | 22.800 | 25.000 | 24.700 | 46.700 | 37.200 | 100.000 | 89.000 | 93.000 | 26.000 | 19.100 | 18.900 |
| 24 | 23.600 | 22.000 | 25.500 | 28.200 | 42.500 | 33.500 | 104.000 | 98.500 | 87.500 | 25.400 | 19.500 | 19.300 |
| 25 | 25.500 | 23.400 | 24.400 | 29.400 | 39.000 | 40.800 | 116.000 | 126.000 | 83.400 | 25.100 | 18.800 | 23.300 |
| 26 | 25.700 | 25.500 | 22.900 | 28.000 | 37.500 | 49.900 | 114.000 | 136.000 | 87.400 | 24.600 | 17.700 | 25.700 |
| 27 | 26.000 | 22.800 | 23.800 | 30.400 | 33.700 | 71.200 | 106.000 | 130.000 | 79.500 | 24.500 | 17.800 | 26.000 |
| 28 | 29.100 | 23.500 | 24.200 | 28.200 | 33.400 | 77.000 | 103.000 | 130.000 | 73.200 | 24.700 | 18.000 | 23.700 |
| 29 | 28.500 | 24.600 | 25.600 | 26.300 | | 70.000 | 93.200 | 135.000 | 68.000 | 24.800 | 19.300 | 24.000 |
| 30 | 25.300 | 24.800 | 25.000 | 29.900 | | 59.500 | 84.800 | 126.000 | 62.700 | 24.800 | 21.500 | 26.300 |
| 31 | 24.200 | | 26.300 | 29.800 | | 54.600 | | 119.000 | | 24.900 | 21.500 | |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** WASHINGTON

**MAJOR BASIN** PACIFIC NORTHWEST

**MINOR BASIN** MIDDLE AND LOWER SNAKE RIVER

**STATION LOCATION** SNAKE RIVER AT
WAWAWAI, WASHINGTON 49

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 10 | 61 | 10 | 18 | 2460 | 169 | 47 | 122 | 1 | 10 | 21 | 4 | 2 | 14 | 1 | 5 | 2 | 1 | 7 |
| 12 | 4 | 61 | 12 | 18 | 1890 | 174 | 48 | 126 | 1 | 10 | 20 | 4 | 4 | 11 | 1 | 6 | 2 | 1 | 8 |
| 1 | 16 | 62 | 1 | 19 | 810 | * | - | - | - | - | - | - | - | - | - | - | - | - | - |

* LOW FLOW - NOT PROCESSED

**STATION LOCATION** SNAKE RIVER AT

WAWAWAI, WASHINGTON 49

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 30 | - | - | - | - | - | - | 0 | 5 | 19 | 8 | 19 | 9 | | | | | | |
| 10 | 9 | 61 | 10 | 27 | - | - | - | - | - | - | 2 | 5 | 12 | 7 | 14 | 9 | | | | | | |
| 10 | 16 | 61 | 10 | 31 | - | - | - | - | - | - | 0 | 4 | 17 | 6 | 17 | 7 | | | | | | |
| 10 | 23 | 61 | 11 | 6 | 0 | 1 | 1 | 1 | 1 | 1 | 7 | 5 | 16 | 5 | 23 | 7 | | | | | | |
| 10 | 30 | 61 | 11 | 14 | - | - | - | - | - | - | 11 | 5 | 26 | 8 | 37 | 9 | | | | | | |
| 11 | 6 | 61 | 11 | 21 | - | - | - | - | - | - | 7 | 6 | 29 | 8 | 36 | 10 | | | | | | |
| 11 | 13 | 61 | 11 | 30 | - | - | - | - | - | - | 3 | 5 | 11 | 7 | 14 | 9 | | | | | | |
| 11 | 20 | 61 | 12 | 5 | - | - | - | - | - | - | 9 | 6 | 12 | 8 | 21 | 10 | | | | | | |
| 11 | 27 | 61 | 12 | 19 | - | - | - | - | - | - | 13 | 4 | 22 | 6 | 35 | 7 | | | | | | |
| 12 | 4 | 61 | 12 | 18 | - | - | - | - | - | - | 5 | 5 | 20 | 7 | 25 | 9 | | | | | | |
| 12 | 11 | 61 | 12 | 19 | - | - | - | - | - | - | 14 | 6 | 30 | 8 | 44 | 10 | | | | | | |
| 12 | 18 | 61 | 1 | 2 | 0 | 1 | 2 | 1 | 2 | 1 | 12 | 6 | 15 | 7 | 27 | 9 | | | | | | |
| 1 | 2 | 62 | 1 | 12 | 0 | 1 | 3 | 2 | 3 | 2 | 21 | 5 | 25 | 6 | 46 | 8 | | | | | | |
| 1 | 8 | 62 | 1 | 22 | - | - | - | - | - | - | 26 | 6 | 24 | 7 | 50 | 9 | | | | | | |
| 1 | 15 | 62 | 1 | 29 | - | - | - | - | - | - | 9 | 5 | 22 | 6 | 31 | 8 | | | | | | |
| 1 | 22 | 62 | 2 | 6 | 0 | 1 | 3 | 2 | 3 | 3 | 4 | 4 | 13 | 6 | 17 | 7 | | | | | | |
| 1 | 29 | 62 | 2 | 13 | - | - | - | - | - | - | 9 | 6 | 9 | 7 | 18 | 9 | | | | | | |
| 2 | 5 | 62 | 2 | 19 | - | - | - | - | - | - | 7 | 5 | 15 | 7 | 22 | 9 | | | | | | |
| 2 | 12 | 62 | 2 | 21 | - | - | - | - | - | - | 31 | 6 | 22 | 7 | 53 | 9 | | | | | | |
| 2 | 19 | 62 | 3 | 6 | - | - | - | - | - | - | 4 | 6 | 0 | 7 | 4 | 9 | | | | | | |
| 2 | 26 | 62 | 3 | 13 | 0 | 1 | 2 | 2 | 2 | 2 | 6 | 4 | 17 | 6 | 23 | 7 | | | | | | |
| 3 | 5 | 62 | 3 | 20 | - | - | - | - | - | - | 11 | 5 | 18 | 7 | 29 | 9 | | | | | | |
| 3 | 12 | 62 | 3 | 28 | - | - | - | - | - | - | 11 | 6 | 16 | 7 | 27 | 9 | | | | | | |
| 3 | 19 | 62 | 4 | 5 | - | - | - | - | - | - | 7 | 6 | 18 | 7 | 25 | 9 | | | | | | |
| 3 | 26 | 62 | 4 | 10 | 3 | 1 | 1 | 1 | 4 | 1 | 33 | 6 | 13 | 5 | 46 | 8 | | | | | | |
| 4 | 2 | 62 | 4 | 19 | - | - | - | - | - | - | 12 | 5 | 14 | 5 | 26 | 7 | | | | | | |
| 4 | 7 | 62 | 4 | 26 | - | - | - | - | - | - | 21 | 7 | 17 | 6 | 38 | 9 | | | | | | |
| 4 | 16 | 62 | 5 | 23 | - | - | - | - | - | - | 6 | 7 | 1 | 7 | 7 | 10 | | | | | | |
| 4 | 23 | 62 | 5 | 28 | 0 | 1 | 0 | 0 | 0 | 1 | 12 | 5 | 15 | 6 | 27 | 7 | | | | | | |
| 4 | 30 | 62 | 6 | 4 | - | - | - | - | - | - | 2 | 7 | 12 | 7 | 14 | 10 | | | | | | |
| 5 | 7 | 62 | 6 | 19 | - | - | - | - | - | - | 11 | 8 | 11 | 7 | 22 | 11 | | | | | | |
| 5 | 14 | 62 | 6 | 26 | - | - | - | - | - | - | 7 | 6 | 15 | 7 | 22 | 9 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | - | - | - | - | - | - | 6 | 5 | 15 | 6 | 21 | 8 | | | | | | |
| 5 | 28 | 62 | 6 | 29 | 1 | 1 | 0 | 1 | 1 | 1 | 2 | 5 | 15 | 6 | 17 | 7 | | | | | | |
| 6 | 4 | 62 | 7 | 5 | - | - | - | - | - | - | 8 | 6 | 16 | 6 | 24 | 8 | | | | | | |
| 6 | 11 | 62 | 7 | 16 | - | - | - | - | - | - | 6 | 5 | 11 | 7 | 17 | 9 | | | | | | |
| 6 | 18 | 62 | 7 | 18 | - | - | - | - | - | - | 8 | 5 | 22 | 7 | 30 | 8 | | | | | | |
| 6 | 25 | 62 | 8 | 6 | 0 | 0 | 1 | 0 | 1 | 0 | 7 | 6 | 7 | 6 | 14 | 8 | | | | | | |
| 7 | 2 | 62 | 8 | 3 | - | - | - | - | - | - | 2 | 6 | 8 | 7 | 10 | 9 | | | | | | |
| 7 | 9 | 62 | 9 | 30 | - | - | - | - | - | - | 7 | 6 | 3 | 6 | 10 | 8 | | | | | | |
| 7 | 16 | 62 | 8 | 3 | - | - | - | - | - | - | 2 | 4 | 13 | 5 | 15 | 6 | | | | | | |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 7 | 23 | 62 | 8 | 21 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 6 | 9 | 6 | 16 | 8 | | | | | | |
| 7 | 30 | 62 | 8 | 28 | - | - | - | - | - | - | 1 | 2 | 7 | 5 | 8 | 5 | | | | | | |
| 8 | 6 | 62 | 8 | 27 | - | - | - | - | - | - | 1 | 2 | 8 | 3 | 9 | 3 | | | | | | |
| 8 | 13 | 62 | 8 | 31 | - | - | - | - | - | - | 3 | 5 | 15 | 7 | 18 | 9 | | | | | | |
| 8 | 20 | 62 | 10 | 6 | - | - | - | - | - | - | 5 | 5 | 17 | 7 | 22 | 9 | | | | | | |
| 8 | 27 | 62 | 9 | 13 | 0 | 0 | 2 | 1 | 2 | 1 | 2 | 6 | 19 | 9 | 21 | 11 | | | | | | |
| 9 | 4 | 62 | 10 | 3 | - | - | - | - | - | - | 1 | 5 | 15 | 7 | 16 | 8 | | | | | | |
| 9 | 10 | 62 | 10 | 9 | - | - | - | - | - | - | 9 | 6 | 18 | 9 | 27 | 11 | | | | | | |
| 9 | 17 | 62 | 10 | 15 | - | - | - | - | - | - | 1 | 5 | 13 | 6 | 14 | 7 | | | | | | |
| 9 | 24 | 62 | 10 | 22 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 3 | 12 | 4 | 13 | 5 | | | | | | |

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 1200 | 0 | 0 | 0 | 0 | 20 | 0 | 210 | 930 | 0 | 350 | 87 | 1 | 88 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 1000 | 0 | 0 | 190 | 0 | 0 | 20 | 150 | 620 | 20 | 310 | | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 1000 | 0 | 20 | 40 | 0 | 20 | 0 | 170 | 730 | 0 | 250 | 88 | 1 | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 1300 | 160 | 20 | 50 | 0 | 0 | 50 | 290 | 720 | 20 | 560 | 88 | 1 | 71 | 1 | 87 | 1 | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 1100 | 0 | 0 | 20 | 0 | 20 | 0 | 100 | 990 | 100 | 370 | 88 | 1 | | | | | | | | | | | | | | | | | | |
| 12 | 5 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 0 | 60 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 1100 | 0 | 0 | 70 | 0 | 50 | 0 | 160 | 810 | 90 | 90 | 88 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 1100 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 950 | 60 | 190 | 82 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 900 | 0 | 50 | 50 | 20 | 50 | 0 | 50 | 650 | 90 | 160 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 1400 | 50 | 0 | 20 | 0 | 90 | 70 | 270 | 860 | 180 | 230 | 77 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 6300 | 930 | 40 | 150 | 0 | 500 | 150 | 2280 | 2260 | 1120 | 350 | 71 | 4 | 3 | 3 | 51 | 2 | 92 | 2 | 82 | 1 | 87 | 1 | 73 | 1 | 97 | 1 | 88 | 1 | | |
| 3 | 5 | 62 | 1700 | 0 | 0 | 100 | 0 | 20 | 0 | 1180 | 410 | 930 | 250 | 71 | 3 | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 1400 | 0 | 0 | 0 | 0 | 0 | 0 | 340 | 1020 | 140 | 230 | 87 | 1 | 71 | 1 | 92 | 1 | 88 | 1 | | | | | | | | | | | | |
| 4 | 2 | 62 | 2300 | 0 | 0 | 90 | 0 | 760 | 20 | 760 | 650 | 1300 | 670 | 71 | 3 | 57 | 2 | 77 | 1 | 52 | 1 | | | | | | | | | | | | |
| 4 | 16 | 62 | 1100 | 0 | 0 | 80 | 0 | 130 | 20 | 230 | 630 | 360 | 1160 | 71 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 3300 | 0 | 0 | 0 | 0 | 0 | 0 | 1700 | 1620 | 210 | 290 | 71 | 4 | 88 | 1 | 73 | 1 | 92 | 1 | 97 | 1 | | | | | | | | | | |
| 5 | 21 | 62 | 600 | 0 | 0 | 0 | 0 | 0 | 0 | 380 | 230 | 110 | 950 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 1100 | 0 | 0 | 20 | 0 | 0 | 0 | 510 | 570 | 40 | 1330 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 1100 | 0 | 20 | 0 | 40 | 0 | 0 | 150 | 910 | 20 | 230 | 82 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 1100 | 0 | 0 | 80 | 0 | 0 | 0 | 510 | 550 | 130 | 420 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 1400 | 0 | 0 | 20 | 0 | 0 | 0 | 420 | 970 | 0 | 460 | 82 | 1 | 71 | 1 | 92 | 1 | 68 | 1 | | | | | | | | | | | | |
| 8 | 6 | 62 | 1300 | 0 | 0 | 0 | 0 | 0 | 0 | 290 | 1040 | 120 | 370 | 92 | 2 | 82 | 1 | 68 | 1 | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 3600 | 0 | 0 | 130 | 0 | 0 | 0 | 2110 | 1350 | 0 | 720 | 69 | 4 | 68 | 2 | 92 | 2 | 71 | 1 | 82 | 1 | 88 | 1 | | | | | | | | |
| 9 | 4 | 62 | 1800 | 170 | 0 | 210 | 0 | 120 | 0 | 170 | 1160 | 120 | 250 | 92 | 2 | 3 | 1 | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 300 | 10 | 0 | 60 | 0 | 10 | 0 | 70 | 190 | 60 | 890 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA *(Identifiable) Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 92 | 17 | 64 | 15 | 36 | 11 | 70 | 8 | 49 | 0 | 0 | 20 | 46 | 1 | | | | | | | | | 0 | | | | | | | 2 | 2 |
| 10 | 16 | 61 | 92 | 15 | 58 | 15 | 36 | 9 | 70 | 9 | 52 | 60 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 2 | 12 | 70 | 11 | 92 | 9 | 36 | 9 | 59 | 40 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 1 | 1 |
| 11 | 20 | 61 | 71 | 9 | 36 | 9 | 2 | 8 | 65 | 7 | 68 | 160 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 12 | 4 | 61 | 36 | 12 | 71 | 9 | 70 | 7 | 46 | 7 | 65 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 5 | 61 | 62 | 25 | 47 | 15 | 95 | 13 | 2 | 7 | 40 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 36 | 13 | 80 | 9 | 71 | 8 | 70 | 8 | 62 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 36 | 19 | 92 | 14 | 56 | 6 | 93 | 5 | 56 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 92 | 10 | 36 | 10 | 65 | 6 | 76 | 5 | 69 | 200 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 2 | 5 | 62 | 36 | 13 | 9 | 9 | 70 | 7 | 71 | 6 | 65 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 36 | 9 | 97 | 8 | 82 | 8 | 92 | 7 | 68 | 150 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 82 | 27 | 71 | 8 | 47 | 8 | 92 | 7 | 50 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 92 | 14 | 65 | 11 | 71 | 7 | 36 | 7 | 61 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 82 | 20 | 92 | 11 | 9 | 6 | 14 | 5 | 58 | 0 | 0 | 10 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 80 | 29 | 92 | 13 | 14 | 6 | 97 | 5 | 47 | 0 | 0 | 41 | 11 | 3 | 2 | 2 | | | | | | | 0 | | | | | | | 0 | 1 |
| 5 | 7 | 62 | 80 | 45 | 2 | 7 | 14 | 6 | 92 | 4 | 38 | 20 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 5 | 21 | 62 | 80 | 28 | 14 | 10 | 2 | 9 | 92 | 4 | 49 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 80 | 37 | 36 | 7 | 92 | 5 | 14 | 4 | 47 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 36 | 20 | 92 | 12 | 52 | 10 | 80 | 8 | 50 | 0 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 2 | 15 | 80 | 8 | 56 | 7 | 65 | 6 | 64 | 110 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 36 | 19 | 92 | 16 | 80 | 9 | 26 | 7 | 49 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 92 | 20 | 47 | 15 | 36 | 12 | 58 | 8 | 45 | 0 | 0 | 9 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 58 | 46 | 92 | 10 | 45 | 10 | 36 | 7 | 27 | 0 | 0 | 17 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 92 | 40 | 47 | 13 | 58 | 8 | 36 | 5 | 34 | 0 | 0 | 55 | 22 | 2 | 13 | 2 | 15 | 1 | 11 | 1 | | | 1 | | | | | | | 1 | 0 |
| 9 | 17 | 62 | 92 | 23 | 47 | 17 | 36 | 12 | 58 | 8 | 40 | 0 | 0 | 7 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

NATIONAL WATER QUALITY NETWORK

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** WASHINGTON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** MIDDLE AND LOWER SNAKE RIVER
**STATION LOCATION** SNAKE RIVER AT
WAWAWAI, WASHINGTON 49

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 9 | 62 | 20.0 | 8.9 | 7.8 | - | 9 | 1.4 | 2.2 | .1 | 4 | 44 | 43 | 15 | 4 | 11 | .0 | 84 | 2200 |
| 7 | 16 | 62 | 20.0 | 8.8 | 8.0 | .5 | 10 | 1.2 | 2.5 | .1 | 6 | 52 | 51 | 11 | 3 | 13 | .0 | 94 | 600 |
| 7 | 23 | 62 | 22.0 | 8.1 | 8.0 | - | 10 | 1.2 | 1.9 | .1 | 7 | 62 | 56 | 11 | 3 | 17 | .0 | 104 | 2600 |
| 7 | 30 | 62 | 23.0 | 7.9 | 8.2 | - | 12 | .3 | 1.2 | .1 | 8 | 64 | 64 | 11 | 4 | 19 | .0 | 116 | 1200 |
| 8 | 6 | 62 | 21.0 | 9.0 | 8.2 | 1.0 | 9 | 1.6 | 2.3 | .1 | 8 | 64 | 74 | 14 | 2 | 24 | .0 | 134 | 600 |
| 8 | 13 | 62 | 22.7 | 8.7 | 8.5 | 1.0 | 12 | 1.2 | 3.0 | .1 | 10 | 86 | 84 | 13 | 3 | 29 | .0 | 155 | 50 |
| 8 | 20 | 62 | 24.0 | 8.4 | 8.0 | - | 9 | 1.4 | 3.2 | .0 | 12 | 88 | 86 | 10 | 6 | 30 | .0 | 165 | 50 |
| 8 | 27 | 62 | 19.0 | 8.8 | 7.9 | .6 | 15 | 1.3 | 3.2 | .1 | 9 | 93 | 94 | 13 | 2 | 32 | .0 | 177 | 50 |
| 9 | 4 | 62 | 19.8 | 8.9 | 8.4 | 1.0 | 10 | - | - | .1 | 12 | 100 | 101 | 14 | 2 | 37 | .0 | 196 | 1400 |
| 9 | 10 | 62 | 18.0 | 8.9 | 8.2 | 1.4 | 11 | - | - | .1 | 13 | 99 | 114 | 12 | 2 | 39 | .0 | 209 | 50 |
| 9 | 17 | 62 | 18.0 | 9.1 | 8.4 | 1.0 | 11 | 1.4 | 3.7 | .1 | 13 | 103 | 100 | 16 | 3 | 36 | .1 | 191 | - |
| 9 | 22 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2400 |
| 9 | 24 | 62 | 20.3 | 9.6 | 8.2 | .5 | 11 | 1.3 | 3.4 | .1 | 15 | 110 | 105 | - | 2 | 38 | .1 | 213 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Clarkston, Washington
Operated by U.S. Geological Survey

STATE Washington

MAJOR BASIN Pacific Northwest

MINOR BASIN Middle and Lower Snake River

STATION LOCATION Snake River at
Wawawai, Washington

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 19.900 | 22.300 | 26.000 | 25.400 | 28.000 | 34.700 | 52.500 | 78.600 | 116.000 | 59.700 | 25.200 | 21.200 |
| 2 | 19.100 | 22.500 | 28.600 | 23.500 | 30.000 | 34.100 | 58.500 | 74.900 | 120.000 | 56.500 | 25.500 | 22.000 |
| 3 | 18.800 | 23.500 | 28.000 | 26.400 | 30.000 | 31.700 | 63.700 | 77.600 | 122.000 | 51.800 | 24.200 | 19.200 |
| 4 | 18.500 | 22.700 | 28.200 | 26.400 | 27.600 | 27.300 | 66.800 | 81.800 | 126.000 | 47.400 | 23.600 | 18.900 |
| 5 | 18.000 | 22.700 | 29.000 | 27.600 | 27.000 | 25.000 | 76.500 | 87.000 | 114.000 | 45.400 | 23.800 | 21.600 |
| 6 | 18.500 | 22.200 | 30.000 | 26.000 | 29.900 | 30.000 | 89.200 | 86.800 | 107.000 | 43.500 | 23.200 | 20.300 |
| 7 | 19.000 | 21.300 | 28.900 | 27.700 | 31.000 | 28.100 | 117.000 | 87.500 | 95.800 | 42.300 | 23.100 | 20.500 |
| 8 | 19.500 | 21.800 | 28.400 | 45.800 | 31.700 | 27.100 | 118.000 | 93.700 | 85.000 | 40.200 | 26.600 | 19.200 |
| 9 | 19.900 | 21.500 | 28.000 | 66.800 | 30.700 | 26.900 | 95.600 | 108.000 | 87.100 | 35.400 | 28.200 | 18.600 |
| 10 | 19.200 | 22.000 | 25.900 | 50.900 | 31.000 | 30.300 | 81.600 | 121.000 | 95.600 | 34.200 | 28.300 | 17.600 |
| 11 | 22.000 | 22.400 | 22.000 | 41.800 | 29.000 | 25.300 | 71.000 | 124.000 | 99.300 | 35.000 | 27.000 | 19.500 |
| 12 | 24.100 | 22.800 | 23.600 | 38.000 | 31.500 | 23.600 | 61.000 | 119.000 | 106.000 | 34.600 | 24.600 | 19.800 |
| 13 | 23.300 | 22.400 | 21.700 | 37.300 | 34.200 | 26.900 | 59.000 | 117.000 | 107.000 | 30.600 | 21.800 | 23.900 |
| 14 | 25.800 | 22.400 | 22.800 | 32.400 | 35.300 | 26.500 | 62.800 | 114.000 | 108.000 | 31.800 | 23.100 | 21.100 |
| 15 | 25.700 | 21.900 | 23.900 | 30.100 | 37.800 | 28.600 | 73.600 | 107.000 | 108,000 | 32.700 | 23.400 | 20.500 |
| 16 | 23.500 | 21.700 | 23.700 | 30.700 | 40.000 | 28.100 | 83.000 | 100.000 | 103.000 | 32.400 | 23.000 | 18.800 |
| 17 | 23.600 | 20.700 | 20.900 | 32.500 | 40.400 | 29.500 | 88.000 | 91.000 | 101.000 | 31.500 | 20.500 | 18.900 |
| 18 | 23.500 | 20.100 | 21.000 | 30.400 | 42.200 | 26.700 | 95.600 | 91.900 | 102.000 | 29.700 | 20.400 | 20.200 |
| 19 | 23.200 | 18.800 | 20.900 | 30.600 | 42.600 | 27.000 | 107.000 | 95.300 | 102.000 | 29.100 | 18.900 | 22.200 |
| 20 | 22.900 | 18.800 | 21.200 | 28.300 | 44.400 | 33.700 | 126.000 | 96.000 | 100.000 | 29.000 | 18.900 | 20.800 |
| 21 | 23.000 | 20.800 | 22.200 | 26.800 | 46.800 | 35.100 | 132.000 | 91.800 | 97.700 | 28.800 | 19.200 | 20.500 |
| 22 | 22.300 | 22.500 | 26.800 | 24.000 | 47.600 | 37.300 | 115.000 | 88.900 | 95.600 | 26.600 | 19.800 | 19.400 |
| 23 | 21.800 | 22.800 | 25.000 | 24.700 | 46.700 | 37.200 | 100.000 | 89.000 | 93.000 | 26.000 | 19.100 | 18.900 |
| 24 | 23.600 | 22.000 | 25.500 | 28.200 | 42.500 | 33.500 | 104.000 | 98.500 | 87.500 | 25.400 | 19.500 | 19.300 |
| 25 | 25.500 | 23.400 | 24.400 | 29.400 | 39.000 | 40.800 | 116.000 | 126.000 | 83.400 | 25.100 | 18.800 | 23.300 |
| 26 | 25.700 | 25.500 | 22.900 | 28.000 | 37.500 | 49.900 | 114.000 | 136.000 | 87.400 | 24.600 | 17.700 | 25.700 |
| 27 | 26.000 | 22.800 | 23.800 | 30.400 | 33.700 | 71.200 | 106.000 | 130.000 | 79.500 | 24.500 | 17.800 | 26.000 |
| 28 | 29.100 | 23.500 | 24.200 | 28.200 | 33.400 | 77.000 | 103.000 | 130.000 | 73.200 | 24.700 | 18.000 | 23.700 |
| 29 | 28.500 | 24.600 | 25.600 | 26.300 |  | 70.000 | 93.200 | 135.000 | 68.000 | 24.800 | 19.300 | 24.000 |
| 30 | 25.300 | 24.800 | 25.000 | 29.900 |  | 59.500 | 84.800 | 126.000 | 62.700 | 24.800 | 21.500 | 26.300 |
| 31 | 24.200 |  | 26.300 | 29.800 |  | 54.600 |  | 119.000 |  | 24.900 | 21.500 |  |

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Weiser, Idaho
Operated by U.S. Geological Survey

MINOR BASIN Central Snake River

STATION LOCATION Snake River at
Payette, Idaho

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 10.500 | 11.800 | 11.500 | 10.800 | 12.500 | 12.100 | 19.800 | 16.400 | 20.400 | 10.100 | 10.400 | 11.700 |
| 2 | 10.300 | 11.700 | 11.400 | 10.700 | 12.600 | 11.700 | 19.700 | 19.100 | 20.500 | 9.520 | 10.400 | 10.900 |
| 3 | 10.300 | 11.900 | 11.300 | 10.900 | 12.500 | 12.200 | 21.200 | 22.900 | 19.400 | 9.200 | 10.800 | 10.300 |
| 4 | 10.900 | 11.900 | 11.100 | 10.700 | 13.500 | 13.300 | 22.400 | 23.700 | 19.900 | 8.300 | 10.700 | 10.100 |
| 5 | 10.300 | 11.800 | 11.000 | 10.700 | 13.700 | 12.400 | 21.800 | 20.900 | 21.200 | 8.000 | 10.900 | 10.300 |
| 6 | 10.300 | 11.700 | 11.200 | 10.700 | 12.300 | 13.000 | 22.500 | 21.200 | 20.400 | 7.680 | 11.400 | 12.300 |
| 7 | 10.300 | 11.800 | 11.300 | 11.000 | 13.000 | 12.600 | 22.900 | 20.300 | 18.200 | 7.680 | 11.200 | 12.500 |
| 8 | 10.400 | 11.700 | 11.200 | 11.100 | 12.200 | 14.900 | 22.400 | 18.000 | 16.200 | 7.380 | 10.700 | 11.200 |
| 9 | 10.100 | 11.900 | 10.900 | 11.700 | 15.000 | 14.700 | 22.100 | 19.400 | 14.500 | 8.220 | 11.200 | 10.800 |
| 10 | 10.100 | 11.800 | 10.800 | 10.900 | 15.300 | 14.800 | 19.100 | 18.400 | 14.600 | 8.000 | 11.100 | 10.700 |
| 11 | 11.700 | 11.700 | 10.700 | 11.200 | 18.200 | 13.400 | 18.600 | 20.300 | 14.600 | 8.430 | 10.200 | 11.000 |
| 12 | 11.700 | 11.800 | 11.900 | 11.200 | 21.200 | 14.500 | 17.200 | 16.700 | 14.200 | 8.540 | 9.980 | 12.100 |
| 13 | 12.200 | 11.500 | 10.900 | 11.100 | 25.300 | 14.300 | 18.500 | 18.600 | 15.300 | 8.360 | 10.200 | 12.400 |
| 14 | 12.300 | 11.400 | 10.900 | 10.700 | 28.700 | 13.300 | 18.800 | 18.000 | 14.900 | 8.510 | 9.980 | 12.900 |
| 15 | 13.000 | 11.200 | 10.800 | 10.600 | 26.000 | 12.400 | 19.900 | 16.100 | 14.400 | 8.540 | 10.200 | 12.900 |
| 16 | 12.600 | 11.300 | 11.000 | 11.000 | 20.600 | 12.600 | 21.400 | 16.600 | 14.000 | 8.660 | 10.100 | 12.300 |
| 17 | 12.600 | 11.300 | 11.200 | 11.600 | 17.600 | 13.400 | 21.200 | 17.200 | 14.200 | 8.580 | 9.980 | 10.800 |
| 18 | 12.400 | 11.400 | 10.800 | 10.600 | 18.000 | 13.600 | 20.600 | 16.800 | 14.400 | 8.370 | 10.200 | 12.100 |
| 19 | 12.100 | 11.300 | 10.700 | 10.300 | 14.500 | 14.000 | 20.300 | 15.700 | 14.400 | 9.230 | 10.200 | 12.200 |
| 20 | 12.300 | 11.300 | 11.300 | 10.500 | 15.500 | 15.300 | 20.900 | 18.800 | 14.800 | 9.230 | 9.800 | 12.100 |
| 21 | 12.400 | 11.400 | 12.500 | 10.200 | 13.900 | 16.100 | 21.300 | 16.700 | 15.100 | 9.290 | 10.100 | 12.100 |
| 22 | 12.100 | 11.400 | 13.500 | 11.000 | 12.800 | 15.900 | 19.300 | 16.400 | 14.700 | 8.730 | 9.630 | 12.300 |
| 23 | 12.200 | 11.800 | 11.700 | 10.500 | 11.700 | 17.800 | 16.500 | 17.600 | 13.700 | 8.660 | 9.970 | 12.200 |
| 24 | 12.500 | 12.100 | 10.900 | 10.000 | 11.500 | 16.900 | 16.700 | 19.300 | 13.400 | 8.540 | 10.200 | 12.100 |
| 25 | 12.200 | 11.800 | 11.300 | 7.500 | 11.600 | 18.300 | 18.200 | 21.000 | 13.300 | 8.500 | 10.100 | 13.200 |
| 26 | 12.200 | 11.400 | 11.300 | 10.500 | 11.100 | 20.800 | 17.300 | 22.500 | 12.000 | 9.290 | 10.500 | 13.200 |
| 27 | 12.600 | 11.800 | 11.200 | 11.500 | 11.800 | 21.200 | 15.000 | 23.300 | 11.800 | 9.460 | 10.300 | 13.400 |
| 28 | 13.300 | 11.800 | 11.200 | 11.000 | 12.600 | 21.000 | 16.300 | 20.600 | 11.500 | 9.540 | 10.300 | 13.300 |
| 29 | 13.200 | 12.600 | 11.300 | 12.000 |  | 23.600 | 16.000 | 22.600 | 10.700 | 9.630 | 11.000 | 14.000 |
| 30 | 11.400 | 11.500 | 10.600 | 11.500 |  | 22.000 | 17.200 | 22.700 | 10.500 | 9.630 | 11.600 | 14.800 |
| 31 | 11.700 |  | 10.700 | 10.900 |  | 21.600 |  | 23.400 |  | 9.820 | 11.500 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** IDAHO
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** CENTRAL SNAKE RIVER
**STATION LOCATION** SNAKE RIVER AT
PAYETTE, IDAHO 102

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 11 | 16 | 61 | 11 | 28 | 0 | 1 | 4 | 2 | 4 | 2 | 21 | 11 | 22 | 14 | 43 | 18 | | | | | | |
| 11 | 21 | 61 | 12 | 5 | 0 | 1 | 4 | 3 | 4 | 3 | 13 | 11 | 26 | 14 | 39 | 18 | | | | | | |
| 11 | 30 | 61 | 12 | 11 | 0 | 1 | 5 | 3 | 5 | 3 | 6 | 8 | 23 | 11 | 29 | 14 | | | | | | |
| 12 | 7 | 61 | 12 | 15 | 0 | 1 | 3 | 2 | 3 | 2 | 10 | 8 | 43 | 11 | 53 | 14 | | | | | | |
| 12 | 13 | 61 | 12 | 26 | 0 | 1 | 2 | 2 | 2 | 2 | 6 | 8 | 14 | 9 | 20 | 12 | | | | | | |
| 12 | 20 | 61 | 12 | 29 | 0 | 1 | 4 | 3 | 4 | 3 | 15 | 4 | 39 | 7 | 54 | 8 | | | | | | |
| 12 | 27 | 61 | 1 | 10 | 0 | 1 | 4 | 3 | 4 | 3 | 7 | 8 | 7 | 10 | 14 | 13 | | | | | | |
| 1 | 3 | 62 | 1 | 11 | 0 | 1 | 0 | 2 | 0 | 2 | 13 | 9 | 19 | 10 | 32 | 13 | | | | | | |
| 1 | 10 | 62 | 1 | 18 | 0 | 1 | 5 | 3 | 5 | 3 | 13 | 8 | 18 | 11 | 31 | 14 | | | | | | |
| 1 | 17 | 62 | 1 | 29 | 0 | 1 | 6 | 3 | 6 | 3 | 13 | 9 | 24 | 11 | 37 | 14 | | | | | | |
| 2 | 8 | 62 | 2 | 16 | 1 | 1 | 3 | 2 | 4 | 2 | 26 | 9 | 25 | 10 | 51 | 14 | | | | | | |
| 2 | 14 | 62 | 2 | 27 | 2 | 2 | 5 | 2 | 7 | 3 | 57 | 7 | 34 | 6 | 91 | 9 | | | | | | |
| 2 | 21 | 62 | 3 | 8 | 1 | 1 | 4 | 2 | 5 | 2 | 32 | 5 | 38 | 6 | 70 | 8 | | | | | | |
| 2 | 28 | 62 | 3 | 15 | 0 | 1 | 1 | 2 | 1 | 2 | 24 | 5 | 36 | 6 | 60 | 8 | | | | | | |
| 3 | 7 | 62 | 3 | 20 | 0 | 1 | 6 | 3 | 6 | 3 | 17 | 8 | 50 | 11 | 67 | 14 | | | | | | |
| 3 | 14 | 62 | 3 | 28 | 1 | 1 | 1 | 2 | 2 | 2 | 14 | 8 | 29 | 10 | 43 | 13 | | | | | | |
| 3 | 21 | 62 | 4 | 3 | 1 | 1 | 3 | 2 | 4 | 2 | 7 | 9 | 11 | 10 | 18 | 13 | | | | | | |
| 3 | 28 | 62 | 4 | 9 | 3 | 2 | 3 | 2 | 6 | 3 | 21 | 9 | 18 | 8 | 39 | 12 | | | | | | |
| 4 | 4 | 62 | 4 | 18 | 1 | 1 | 2 | 1 | 3 | 1 | 19 | 5 | 18 | 6 | 37 | 7 | | | | | | |
| 4 | 10 | 62 | 4 | 25 | 0 | 1 | 4 | 2 | 4 | 2 | 17 | 5 | 24 | 6 | 41 | 7 | | | | | | |
| 4 | 20 | 62 | 4 | 30 | 1 | 1 | 1 | 1 | 2 | 1 | 55 | 6 | 35 | 6 | 90 | 8 | | | | | | |
| 4 | 25 | 62 | 5 | 25 | 0 | 1 | 1 | 1 | 1 | 1 | 13 | 6 | 21 | 7 | 34 | 9 | | | | | | |
| 5 | 2 | 62 | 5 | 29 | 1 | 1 | 5 | 2 | 6 | 2 | 19 | 7 | 46 | 8 | 65 | 11 | | | | | | |
| 5 | 9 | 62 | 6 | 14 | 1 | 1 | 3 | 2 | 4 | 2 | 9 | 7 | 24 | 9 | 33 | 11 | | | | | | |
| 5 | 16 | 62 | 6 | 22 | 1 | 1 | 2 | 2 | 3 | 2 | 11 | 4 | 19 | 5 | 30 | 7 | | | | | | |
| 5 | 23 | 62 | 6 | 27 | 2 | 1 | 4 | 2 | 6 | 2 | 21 | 6 | 21 | 7 | 42 | 9 | | | | | | |
| 5 | 31 | 62 | 7 | 3 | 0 | 1 | 2 | 1 | 2 | 1 | 7 | 8 | 17 | 9 | 24 | 12 | | | | | | |
| 6 | 6 | 62 | 7 | 6 | 1 | 1 | 3 | 2 | 4 | 2 | 8 | 6 | 23 | 7 | 31 | 9 | | | | | | |
| 6 | 13 | 62 | 7 | 17 | 1 | 1 | 2 | 1 | 3 | 1 | 16 | 6 | 37 | 7 | 53 | 9 | | | | | | |
| 6 | 21 | 62 | 7 | 23 | 1 | 1 | 4 | 2 | 5 | 2 | 8 | 5 | 12 | 6 | 20 | 7 | | | | | | |
| 6 | 27 | 62 | 7 | 25 | 0 | 1 | 1 | 1 | 1 | 1 | 4 | 6 | 18 | 7 | 22 | 9 | | | | | | |
| 7 | 11 | 62 | 8 | 7 | 0 | 1 | 4 | 2 | 4 | 2 | 4 | 11 | 27 | 13 | 31 | 17 | | | | | | |
| 7 | 18 | 62 | 8 | 8 | 0 | 1 | 4 | 2 | 4 | 2 | 19 | 11 | 51 | 14 | 70 | 18 | | | | | | |
| 7 | 25 | 62 | 8 | 15 | 0 | 1 | 6 | 3 | 6 | 3 | 0 | 22 | 23 | 14 | 23 | 26 | | | | | | |
| 8 | 1 | 62 | 10 | 4 | 1 | 1 | 3 | 2 | 4 | 2 | 8 | 12 | 17 | 15 | 25 | 19 | | | | | | |
| 8 | 7 | 62 | 8 | 23 | 0 | 1 | 3 | 2 | 3 | 2 | 3 | 11 | 22 | 14 | 25 | 18 | | | | | | |
| 8 | 22 | 62 | 9 | 6 | 0 | 1 | 5 | 3 | 5 | 3 | 3 | 10 | 16 | 13 | 19 | 16 | | | | | | |
| 8 | 29 | 62 | 9 | 11 | 1 | 1 | 2 | 2 | 3 | 2 | 17 | 13 | 4 | 17 | 21 | 21 | | | | | | |
| 9 | 5 | 62 | 9 | 20 | 0 | 1 | 6 | 3 | 6 | 3 | 5 | 9 | 25 | 13 | 30 | 16 | | | | | | |
| 9 | 12 | 62 | 9 | 28 | 0 | 1 | 2 | 2 | 2 | 3 | 7 | 6 | 15 | 10 | 22 | 12 | | | | | | |

## RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** PACIFIC NORTHWEST

**MINOR BASIN** CENTRAL SNAKE RIVER

**STATION LOCATION** SNAKE RIVER AT
PAYETTE, IDAHO

102

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 9 | 19 | 62 | 10 | 17 | 0 | 1 | 3 | 2 | 3 | 2 | 6 | 9 | 17 | 14 | 23 | 17 | | | | | | |
| 9 | 26 | 62 | 10 | 19 | 0 | 1 | 2 | 2 | 2 | 2 | 7 | 8 | 14 | 9 | 21 | 12 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** IDAHO
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** CENTRAL SNAKE RIVER
**STATION LOCATION** SNAKE RIVER AT
PAYETTE, IDAHO

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Code* | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 4400 | 0 | 0 | 290 | 0 | 40 | 20 | 2590 | 1490 | 1330 | 640 | 68 | 4 | 92 | 3 | 71 | 2 | | | | | | | | | | | | |
| 11 | 10 | 61 | 2000 | 0 | 20 | 110 | 0 | 20 | 50 | 800 | 1030 | 1030 | 1070 | 71 | 2 | 68 | 2 | 82 | 1 | 92 | 1 | 87 | 1 | | | | | | | | |
| 11 | 16 | 61 | 2100 | 0 | 0 | 0 | 0 | 20 | 20 | 1060 | 990 | 210 | 270 | 71 | 3 | 82 | 2 | 92 | 1 | 68 | 1 | | | | | | | | | | |
| 11 | 30 | 61 | 5900 | 0 | 20 | 80 | 0 | 40 | 40 | 3600 | 2090 | 1180 | 770 | 71 | 5 | 68 | 3 | 82 | 3 | 92 | 2 | 81 | 1 | 88 | 1 | | | | | | |
| 12 | 8 | 61 | 5300 | 90 | 380 | 160 | 70 | 140 | 20 | 2430 | 2050 | 1620 | 700 | 71 | 4 | 68 | 3 | 82 | 3 | 92 | 3 | 16 | 2 | 88 | 1 | 87 | 1 | | | | |
| 12 | 13 | 61 | 5200 | 20 | 250 | 50 | 0 | 160 | 0 | 2810 | 1960 | 1870 | 430 | 71 | 4 | 68 | 4 | 82 | 2 | 92 | 1 | 16 | 1 | 81 | 1 | 88 | 1 | 87 | 1 | 77 | 1 |
| 12 | 27 | 61 | 7900 | 20 | 110 | 70 | 0 | 250 | 0 | 5090 | 2390 | 1510 | 70 | 71 | 5 | 68 | 4 | 82 | 3 | 92 | 3 | 51 | 1 | 87 | 1 | 88 | 1 | | | | |
| 1 | 10 | 62 | 9600 | 110 | 110 | 200 | 0 | 380 | 180 | 4120 | 4460 | 3290 | 860 | 71 | 5 | 92 | 4 | 68 | 4 | 82 | 3 | 87 | 2 | 69 | 2 | 51 | 2 | 88 | 1 | 81 | 1 |
| 2 | 8 | 62 | 16000 | 770 | 630 | 90 | 0 | 160 | 110 | 10280 | 3940 | 2590 | 520 | 69 | 6 | 68 | 5 | 92 | 4 | 87 | 3 | 82 | 3 | 88 | 3 | 3 | 3 | 16 | 2 | 15 | 1 |
| 2 | 21 | 62 | 6000 | 20 | 0 | 140 | 0 | 230 | 70 | 2370 | 3190 | 900 | 1790 | 73 | 2 | 92 | 2 | 81 | 2 | 88 | 2 | 75 | 1 | 82 | 1 | 87 | 1 | 77 | 1 | | |
| 3 | 7 | 62 | 10100 | 60 | 40 | 230 | 0 | 660 | 130 | 4870 | 4140 | 1490 | 680 | 71 | 5 | 68 | 4 | 88 | 3 | 87 | 3 | 52 | 2 | 75 | 2 | 73 | 2 | 92 | 2 | 82 | 1 |
| 3 | 21 | 62 | 34300 | 20 | 0 | 230 | 0 | 1560 | 340 | 28930 | 3190 | 5860 | 2080 | 71 | 4 | 51 | 3 | 52 | 3 | 87 | 3 | 77 | 2 | 68 | 2 | 88 | 2 | 82 | 2 | 63 | 1 |
| 4 | 4 | 62 | 12800 | 0 | 0 | 160 | 0 | 1740 | 50 | 8360 | 2520 | 7370 | 2500 | 71 | 6 | 57 | 3 | 92 | 2 | 87 | 2 | 68 | 1 | 63 | 1 | 82 | 1 | 73 | 1 | 88 | 1 |
| 4 | 20 | 62 | 13500 | 0 | 40 | 210 | 0 | 0 | 0 | 11250 | 1980 | 5130 | 2740 | 71 | 7 | 88 | 2 | 68 | 1 | 77 | 1 | 69 | 1 | 92 | 1 | | | | | | |
| 5 | 9 | 62 | 48600 | 0 | 0 | 370 | 0 | 370 | 80 | 27010 | 10720 | 7580 | 910 | 71 | 8 | 77 | 5 | 92 | 4 | 88 | 4 | 85 | 3 | 91 | 3 | 82 | 2 | 51 | 1 | | |
| 5 | 23 | 62 | 26500 | 0 | 0 | 250 | 130 | 80 | 0 | 17260 | 8740 | 2950 | 3380 | 71 | 7 | 92 | 3 | 82 | 2 | 88 | 1 | 97 | 1 | 79 | 1 | 85 | 1 | | | | |
| 6 | 6 | 62 | 21500 | 0 | 0 | 210 | 0 | 0 | 0 | 19030 | 2280 | 3880 | 3710 | 71 | 7 | 82 | 3 | 69 | 1 | 77 | 1 | 92 | 1 | | | | | | | | |
| 6 | 21 | 62 | 36500 | 0 | 0 | 720 | 0 | 0 | 0 | 31360 | 4390 | 2570 | 1730 | 71 | 8 | 92 | 4 | 82 | 3 | 69 | 2 | 77 | 1 | 30 | 1 | 24 | 1 | | | | |
| 7 | 11 | 62 | 49400 | 300 | 0 | 7170 | 0 | 340 | 130 | 31270 | 10170 | 1820 | 2490 | 71 | 8 | 92 | 6 | 38 | 3 | 26 | 3 | 82 | 3 | 32 | 3 | 24 | 3 | 84 | 3 | 69 | 3 |
| 8 | 1 | 62 | 34000 | 720 | 0 | 7430 | 0 | 460 | 210 | 20300 | 4900 | 15490 | 5280 | 71 | 7 | 92 | 5 | 38 | 4 | 34 | 4 | 32 | 4 | 68 | 4 | 69 | 3 | 30 | 2 | 81 | 2 |
| 8 | 22 | 62 | 56400 | 170 | 0 | 7430 | 340 | 970 | 0 | 40930 | 6580 | 9240 | 3000 | 71 | 8 | 92 | 6 | 44 | 5 | 68 | 4 | 69 | 4 | 38 | 3 | 51 | 3 | 88 | 2 | 24 | 2 |
| 9 | 5 | 62 | 36600 | 580 | 0 | 4760 | 0 | 2240 | 80 | 25710 | 3190 | 1950 | 1040 | 71 | 8 | 92 | 5 | 51 | 4 | 34 | 3 | 24 | 3 | 38 | 3 | 69 | 3 | 68 | 3 | 3 | 2 |
| 9 | 19 | 62 | 21700 | 0 | 0 | 180 | 0 | 90 | 0 | 21290 | 180 | 2790 | 1670 | 71 | 8 | 92 | 1 | | | | | | | | | | | | | | |

# PLANKTON POPULATION

**STATE** IDAHO
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** CENTRAL SNAKE RIVER
**STATION LOCATION** SNAKE RIVER AT
PAYETTE, IDAHO 102

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 92 | 37 | 26 | 36 | 80 | 4 | 36 | 4 | 19 | 40 | 20 | 29 | 11 | 1 | 17 | 1 | | | | | | | 0 | | | | | | | 2 | 0 |
| 11 | 10 | 61 | 36 | 16 | 92 | 15 | 80 | 13 | 26 | 12 | 44 | 70 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 1 |
| 11 | 16 | 61 | 36 | 26 | 80 | 21 | 92 | 14 | 26 | 5 | 34 | 120 | 20 | 22 | 11 | 1 | 21 | 1 | | | | | | | 0 | | | | | | | 1 | 0 |
| 11 | 30 | 61 | 36 | 20 | 92 | 15 | 80 | 14 | 26 | 8 | 43 | 20 | 10 | 0 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 12 | 8 | 61 | 36 | 23 | 92 | 22 | 80 | 13 | 26 | 9 | 33 | 1620 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 13 | 61 | 36 | 18 | 92 | 11 | 26 | 10 | 33 | 6 | 55 | 270 | 0 | 8 | | | | | | | | | | | 0 | | | | | | | 3 | 0 |
| 12 | 27 | 61 | 36 | 32 | 92 | 26 | 65 | 4 | 6 | 4 | 34 | 200 | 20 | 13 | 2 | 1 | 15 | 1 | | | | | | | 1 | | | | | | | 1 | 2 |
| 1 | 10 | 62 | 92 | 33 | 36 | 21 | 80 | 7 | 65 | 6 | 33 | 140 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 5 | 2 |
| 2 | 8 | 62 | 92 | 22 | 36 | 12 | 65 | 11 | 82 | 8 | 47 | 50 | 10 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 21 | 62 | 2 | 10 | 92 | 9 | 46 | 8 | 6 | 7 | 66 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 3 | 7 | 62 | 6 | 7 | 92 | 7 | 36 | 6 | 26 | 6 | 74 | 80 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 2 |
| 3 | 21 | 62 | 82 | 12 | 65 | 11 | 36 | 11 | 66 | 7 | 59 | 90 | 0 | 70 | 11 | 1 | 17 | 1 | | | | | | | 1 | | | | | | | 3 | 3 |
| 4 | 4 | 62 | 84 | 31 | 92 | 10 | 82 | 8 | 46 | 5 | 46 | 20 | 0 | 42 | 11 | 2 | 17 | 2 | 2 | 1 | | | | | 1 | | | | | | | 4 | 1 |
| 4 | 20 | 62 | 80 | 64 | 92 | 3 | 36 | 2 | 82 | 2 | 29 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 5 | 9 | 62 | 80 | 87 | 9 | 3 | 56 | 2 | 65 | 1 | 7 | 0 | 0 | 16 | 11 | 1 | | | | | | | | | 4 | 50 | 1 | | | | | 0 | 2 |
| 5 | 23 | 62 | 80 | 86 | 92 | 3 | 9 | 3 | 35 | 1 | 7 | 250 | 0 | 36 | 11 | 2 | 2 | 2 | 17 | 1 | | | | | 4 | 50 | 1 | | | | | 1 | 1 |
| 6 | 6 | 62 | 80 | 70 | 35 | 11 | 9 | 4 | 92 | 2 | 13 | 80 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 21 | 62 | 80 | 88 | 56 | 4 | 92 | 2 | 47 | 2 | 4 | 80 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 11 | 62 | 47 | 49 | 92 | 23 | 80 | 11 | 56 | 7 | 10 | 80 | 0 | 449 | 11 | 6 | 21 | 5 | 2 | 5 | 22 | 3 | 15 | 3 | 0 | | | | | | | 3 | 0 |
| 8 | 1 | 62 | 82 | 33 | 47 | 25 | 92 | 15 | 80 | 4 | 23 | 0 | 0 | – | | | | | | | | | | | – | | | | | | | – | – |
| 8 | 22 | 62 | 82 | 41 | 92 | 31 | 58 | 11 | 70 | 3 | 14 | 0 | 0 | 174 | 11 | 5 | 22 | 4 | 2 | 2 | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 5 | 62 | 92 | 37 | 80 | 20 | 82 | 19 | 58 | 9 | 15 | 0 | 0 | 65 | 2 | 3 | 11 | 3 | 22 | 1 | | | | | 4 | 50 | 1 | | | | | 0 | 0 |
| 9 | 19 | 62 | 82 | 78 | 92 | 8 | 58 | 5 | 80 | 3 | 6 | 0 | 0 | 92 | 11 | 3 | 22 | 3 | 15 | 2 | 17 | 2 | 2 | 1 | 3 | 50 | 1 | | | | | 2 | 0 |

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** PACIFIC NORTHWEST

**MINOR BASIN** CENTRAL SNAKE RIVER

**STATION LOCATION** SNAKE RIVER AT

PAYETTE, IDAHO 102

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORM per 100 m |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 11 | 16 | 61 | 4.0 | 11.2 | 8.4 | 3.4 | 24 | - | - | .1 | 24 | 178 | 198 | 3 | 15 | 174 | .0 | 380 | |
| 11 | 21 | 61 | 3.5 | 11.8 | 8.4 | 4.8 | 20 | .9 | 4.0 | .3 | 31 | 183 | 208 | 3 | 15 | 88 | .0 | 300 | |
| 11 | 30 | 61 | 6.5 | 10.4 | 8.4 | 4.6 | 20 | .5 | 4.4 | .3 | 30 | 182 | 206 | 5 | 15 | 88 | .1 | 350 | |
| 12 | 7 | 61 | 4.0 | 10.8 | 8.2 | 3.5 | 34 | .9 | 4.9 | .3 | 35 | 184 | 190 | 30 | 9 | 65 | .3 | 350 | |
| 12 | 8 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 130 |
| 12 | 13 | 61 | 3.5 | 8.8 | 8.1 | 1.0 | 21 | 2.1 | 4.9 | .3 | 33 | 182 | 206 | 40 | 12 | 65 | .1 | 390 | 510 |
| 12 | 20 | 61 | 4.4 | 6.1 | 8.1 | 1.0 | 17 | 1.4 | 5.0 | .2 | 29 | 174 | 206 | 7 | 15 | 102 | .1 | 375 | 710 |
| 12 | 27 | 61 | 5.0 | 11.1 | 8.1 | 4.2 | 15 | .8 | 5.4 | .2 | 28 | 182 | 202 | 8 | 18 | 90 | .0 | 390 | 460 |
| 1 | 3 | 62 | 3.3 | 11.4 | 8.1 | 3.1 | 20 | 1.2 | 3.9 | .0 | 28 | 180 | 208 | 9 | 14 | 92 | .0 | 350 | 640 |
| 1 | 10 | 62 | 4.4 | 10.4 | 8.1 | 3.8 | 26 | 1.3 | 4.9 | .0 | 28 | 180 | 192 | 15 | 18 | 102 | .1 | 350 | 460 |
| 1 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 500 |
| 2 | 7 | 62 | 1.7 | 9.0 | 8.4 | 4.1 | 13 | 1.0 | 3.2 | .1 | 27 | 164 | 204 | 25 | 20 | 72 | .0 | 370 | |
| 2 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 440 |
| 2 | 14 | 62 | 6.1 | 8.7 | 7.6 | 4.6 | 30 | 2.1 | 5.2 | .1 | 26 | 136 | 182 | 45 | 290 | 62 | .1 | 290 | 420 |
| 2 | 21 | 62 | 5.5 | 9.8 | 8.3 | 2.6 | 25 | 2.0 | 6.9 | .2 | 20 | 132 | 158 | 30 | 42 | 66 | .2 | 290 | 150 |
| 2 | 28 | 62 | 7.2 | 12.5 | 8.2 | 3.2 | 18 | 2.2 | 6.6 | .1 | 24 | 134 | 170 | 30 | 39 | 70 | .2 | 300 | 45 |
| 3 | 7 | 62 | 9.5 | 9.8 | 8.1 | 2.2 | 16 | 1.9 | 7.0 | .3 | 23 | 148 | 168 | 30 | 37 | 74 | .1 | 320 | |
| 3 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 880 |
| 3 | 14 | 62 | 5.0 | 10.5 | 8.5 | 3.0 | 21 | 2.2 | 4.6 | .1 | 30 | 150 | 172 | 25 | 20 | 70 | .0 | 340 | 87 |
| 3 | 21 | 62 | 9.4 | 10.3 | 8.1 | 4.5 | 22 | .8 | 4.3 | .1 | 29 | 148 | 176 | 25 | 22 | 71 | .0 | 330 | 100 |
| 3 | 28 | 62 | 8.8 | 10.0 | 8.1 | 3.9 | 27 | 1.7 | 4.4 | .1 | 25 | 130 | 154 | 20 | 180 | 55 | .0 | 300 | 280 |
| 4 | 3 | 62 | 12.2 | 9.5 | 8.4 | 3.3 | 31 | .8 | 4.9 | .2 | 22 | 130 | 144 | 30 | 35 | 45 | .1 | 290 | 520 |
| 4 | 10 | 62 | 10.6 | 10.1 | 8.4 | 3.3 | 26 | 1.9 | 5.2 | .1 | 20 | 104 | 134 | 30 | 40 | 58 | .0 | 260 | |
| 4 | 11 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 60 |
| 4 | 20 | 62 | 12.2 | 8.5 | 8.4 | 2.8 | 21 | 2.0 | 5.3 | .2 | 10 | 80 | 82 | 35 | 40 | 31 | .0 | 250 | |
| 4 | 25 | 62 | 12.0 | 7.9 | 8.4 | 3.6 | 26 | 1.8 | 4.7 | .1 | 10 | 84 | 84 | 30 | 37 | 38 | .1 | 240 | 2500 |
| 5 | 2 | 62 | 13.0 | 9.4 | 8.4 | 4.3 | 25 | 2.0 | 8.0 | .1 | 10 | 126 | 154 | 15 | 45 | 57 | .5 | 290 | |
| 5 | 9 | 62 | 14.0 | 9.4 | 8.4 | 4.7 | 27 | 2.6 | 6.7 | .1 | 25 | 102 | 124 | 15 | 60 | 56 | .0 | 260 | 180 |
| 5 | 16 | 62 | 14.0 | 7.8 | 8.4 | 3.3 | 30 | 3.2 | 8.9 | .1 | 22 | 112 | 136 | 20 | 68 | 66 | .0 | 260 | |
| 5 | 23 | 62 | 15.5 | 7.7 | 8.4 | 4.0 | 30 | 3.4 | 8.2 | .1 | 20 | 118 | 126 | 25 | 68 | 64 | .0 | 270 | 590 |
| 5 | 31 | 62 | 14.4 | 9.1 | 8.5 | 3.4 | 28 | 3.0 | 8.5 | .1 | 17 | 100 | 112 | 15 | 34 | 49 | .1 | 250 | |
| 6 | 6 | 62 | 13.9 | 9.6 | 8.7 | 5.8 | 27 | 2.0 | 7.5 | .1 | 15 | 88 | 102 | 15 | 36 | 49 | .1 | 210 | |
| 6 | 13 | 62 | 15.6 | 6.3 | 8.1 | 2.2 | 38 | 1.9 | 6.9 | .7 | 26 | 82 | 86 | 20 | 60 | 45 | .1 | 220 | 400 |
| 6 | 21 | 62 | 20.0 | 5.5 | 8.1 | 1.0 | 32 | 2.6 | 7.4 | .3 | 21 | 96 | 104 | 15 | 90 | 55 | .0 | 260 | |
| 6 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2800 |
| 6 | 28 | 62 | 20.0 | 7.0 | 8.2 | 2.2 | 32 | 1.8 | 7.2 | .8 | 19 | 104 | 112 | 20 | 46 | 62 | .0 | 290 | |
| 7 | 11 | 62 | 23.0 | 6.5 | 8.7 | 3.2 | 35 | 3.2 | 6.5 | .1 | 20 | 136 | 150 | 15 | 45 | 82 | .0 | 300 | 31 |
| 7 | 18 | 62 | 20.0 | 2.9 | 8.3 | 2.1 | 33 | 2.5 | 5.7 | .1 | 10 | 140 | 144 | 15 | 45 | 78 | .0 | 320 | 21 |
| 7 | 25 | 62 | 25.0 | 6.3 | 8.4 | 5.8 | 30 | 2.0 | 3.3 | - | 29 | 126 | 163 | 70 | 60 | 82 | .3 | - | 29 |

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** CENTRAL SNAKE RIVER
**STATION LOCATION** SNAKE RIVER AT
PAYETTE, IDAHO

102

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 8 | 1 | 62 | 20.0 | 7.2 | 8.3 | 6.2 | 21 | 3.5 | 6.5 | - | 24 | 146 | 170 | 25 | 35 | 81 | .2 | 365 | 900 |
| 8 | 8 | 62 | 21.7 | 6.8 | 8.4 | 3.7 | 18 | 3.0 | 6.0 | - | 29 | | 178 | 25 | 61 | 59 | .1 | 300 | 1200 |
| 8 | 22 | 62 | 20.0 | 6.6 | 8.2 | 4.5 | 28 | 3.0 | 6.8 | - | 27 | - | 144 | 50 | 34 | 84 | .2 | 375 | 8300 |
| 8 | 29 | 62 | 18.0 | 8.0 | 8.4 | 5.7 | 18 | 1.9 | 7.1 | - | 20 | - | 106 | 50 | 25 | 110 | .1 | 375 | - |
| 9 | 5 | 62 | 19.0 | 9.2 | 8.5 | 7.0 | 20 | 2.0 | 3.8 | .9 | 22 | 164 | 196 | 25 | - | 78 | .0 | 290 | 7000 |
| 9 | 12 | 62 | 18.0 | 8.3 | 8.6 | 6.1 | 19 | 1.6 | 4.3 | .3 | 26 | 154 | 184 | 45 | 37 | 84 | .1 | 360 | 10000 |
| 9 | 19 | 62 | 17.5 | 8.9 | 8.5 | 5.8 | 29 | 3.6 | 5.5 | - | 19 | 144 | 176 | 35 | 40 | 75 | .0 | 350 | 6900 |
| 9 | 26 | 62 | 16.5 | 7.6 | 8.4 | 4.4 | 24 | 2.0 | 5.6 | - | 28 | 146 | 182 | 25 | 32 | 43 | .0 | 350 | 2100 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

| | |
|---|---|
| **STATE** | COLORADO |
| **MAJOR BASIN** | MISSOURI RIVER |
| **MINOR BASIN** | SOUTH PLATTE RIVER |
| **STATION LOCATION** | SOUTH PLATTE RIVER AT<br>JULESBURG, COLORADO |

92

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 13 | 0 | 3 | 46 | 15 | 46 | 15 | 35 | 28 | 54 | 31 | 89 | 59 | | | | | | |
| 10 | 9 | 61 | 11 | 8 | 6 | 4 | 29 | 11 | 35 | 12 | 13 | 31 | 43 | 37 | 56 | 48 | | | | | | |
| 10 | 16 | 61 | 10 | 30 | 2 | 3 | 15 | 8 | 17 | 9 | 33 | 23 | 83 | 29 | 116 | 37 | | | | | | |
| 10 | 30 | 61 | 11 | 7 | 6 | 4 | 32 | 12 | 38 | 13 | 28 | 30 | 71 | 37 | 99 | 48 | | | | | | |
| 11 | 6 | 61 | 11 | 16 | 6 | 4 | 34 | 12 | 40 | 13 | 104 | 19 | 58 | 25 | 162 | 31 | | | | | | |
| 11 | 14 | 61 | 11 | 29 | 0 | 1 | 32 | 10 | 32 | 10 | 0 | 21 | 41 | 31 | 41 | 37 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | 1 | 2 | 48 | 13 | 49 | 13 | 0 | 16 | 39 | 25 | 39 | 29 | | | | | | |
| 11 | 27 | 61 | 1 | 16 | 4 | 3 | 36 | 13 | 40 | 13 | 13 | 26 | 69 | 38 | 82 | 46 | | | | | | |
| 12 | 4 | 61 | 12 | 11 | 4 | 3 | 49 | 14 | 53 | 14 | 20 | 27 | 91 | 38 | 111 | 47 | | | | | | |
| 12 | 12 | 61 | 12 | 21 | 0 | 2 | 22 | 11 | 22 | 11 | 2 | 17 | 54 | 25 | 56 | 30 | | | | | | |
| 12 | 18 | 61 | 12 | 29 | 4 | 3 | 36 | 13 | 40 | 13 | 6 | 16 | 55 | 26 | 61 | 31 | | | | | | |
| 1 | 5 | 62 | 1 | 30 | 6 | 4 | 28 | 10 | 34 | 11 | 15 | 25 | 68 | 28 | 83 | 38 | | | | | | |
| 1 | 22 | 62 | 2 | 7 | 2 | 4 | 41 | 14 | 43 | 14 | 35 | 22 | 69 | 30 | 104 | 37 | | | | | | |
| 2 | 13 | 62 | 2 | 26 | 6 | 5 | 33 | 12 | 39 | 13 | 26 | 24 | 72 | 30 | 98 | 38 | | | | | | |
| 2 | 20 | 62 | 3 | 1 | 3 | 4 | 38 | 12 | 41 | 13 | 27 | 22 | 38 | 28 | 65 | 36 | | | | | | |
| 2 | 26 | 62 | 3 | 14 | 1 | 2 | 2 | 6 | 3 | 6 | 52 | 23 | 82 | 32 | 134 | 36 | | | | | | |
| 3 | 5 | 62 | 3 | 15 | 0 | 3 | 42 | 13 | 42 | 13 | 48 | 22 | 61 | 28 | 109 | 36 | | | | | | |
| 3 | 12 | 62 | 3 | 22 | 2 | 3 | 15 | 8 | 17 | 8 | 30 | 23 | 57 | 28 | 87 | 36 | | | | | | |
| 3 | 19 | 62 | 4 | 2 | 4 | 4 | 41 | 14 | 45 | 15 | 50 | 24 | 92 | 31 | 142 | 39 | | | | | | |
| 3 | 26 | 62 | 4 | 5 | 0 | 3 | 35 | 13 | 35 | 13 | 20 | 22 | 76 | 29 | 96 | 36 | | | | | | |
| 4 | 2 | 62 | 4 | 12 | 3 | 3 | 19 | 8 | 22 | 9 | 40 | 23 | 46 | 27 | 86 | 35 | | | | | | |
| 4 | 11 | 62 | 6 | 28 | 2 | 4 | 28 | 11 | 30 | 12 | 127 | 26 | 64 | 30 | 191 | 40 | | | | | | |
| 4 | 16 | 62 | 7 | 11 | 2 | 3 | 5 | 3 | 7 | 4 | 28 | 29 | 37 | 25 | 65 | 38 | | | | | | |
| 4 | 26 | 62 | 6 | 15 | 1 | 3 | 27 | 9 | 28 | 9 | 22 | 34 | 64 | 43 | 86 | 55 | | | | | | |
| 4 | 30 | 62 | 6 | 19 | 0 | 3 | 21 | 11 | 21 | 11 | 58 | 30 | 65 | 42 | 123 | 52 | | | | | | |
| 5 | 7 | 62 | 6 | 5 | 0 | 3 | 20 | 10 | 20 | 10 | 85 | 33 | 129 | 37 | 214 | 50 | | | | | | |
| 5 | 14 | 62 | 6 | 18 | 30 | 20 | 18 | 10 | 48 | 22 | 140 | 58 | 106 | 44 | 246 | 73 | | | | | | |
| 5 | 28 | 62 | 6 | 28 | 23 | 14 | 27 | 9 | 50 | 17 | 632 | 59 | 145 | 33 | 777 | 68 | | | | | | |
| 6 | 14 | 62 | 7 | 12 | 4 | 4 | 29 | 11 | 33 | 12 | 41 | 33 | 84 | 40 | 125 | 52 | | | | | | |
| 6 | 26 | 62 | 7 | 23 | 0 | 2 | 41 | 14 | 41 | 14 | 20 | 23 | 60 | 30 | 80 | 38 | | | | | | |
| 7 | 6 | 62 | 8 | 13 | 3 | 5 | 39 | 13 | 42 | 13 | 70 | 27 | 64 | 30 | 134 | 40 | | | | | | |
| 7 | 9 | 62 | 8 | 6 | – | – | – | – | – | – | 2 | 3 | 8 | 4 | 10 | 5 | | | | | | |
| 7 | 9 | 62 | 8 | 21 | 52 | 27 | 32 | 13 | 84 | 30 | 197 | 55 | 61 | 38 | 258 | 67 | | | | | | |
| 7 | 16 | 62 | 8 | 10 | 1 | 2 | 13 | 10 | 14 | 10 | 14 | 13 | 99 | 20 | 113 | 24 | | | | | | |
| 7 | 23 | 62 | 8 | 20 | 27 | 11 | 12 | 10 | 39 | 15 | 133 | 22 | 105 | 19 | 238 | 29 | | | | | | |
| 7 | 30 | 62 | 8 | 21 | 2 | 3 | 43 | 14 | 45 | 14 | 10 | 26 | 109 | 37 | 119 | 45 | | | | | | |
| 8 | 6 | 62 | 8 | 28 | 5 | 6 | 30 | 11 | 35 | 13 | 81 | 45 | 129 | 44 | 210 | 63 | | | | | | |
| 8 | 13 | 62 | 8 | 29 | 3 | 3 | 12 | 8 | 15 | 9 | 5 | 26 | 46 | 38 | 51 | 46 | | | | | | |
| 8 | 20 | 62 | 9 | 5 | 1 | 3 | 27 | 11 | 28 | 11 | 0 | 84 | 59 | 39 | 59 | 93 | | | | | | |
| 8 | 27 | 62 | 9 | 12 | 1 | 2 | 28 | 14 | 29 | 14 | 0 | 151 | 65 | 50 | 65 | 159 | | | | | | |

## RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** SOUTH PLATTE RIVER

**STATION LOCATION** SOUTH PLATTE RIVER AT

JULESBURG, COLORADO 92

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 9 | 5 | 62 | 9 | 20 | 0 | 2 | 18 | 9 | 18 | 9 | 15 | 32 | 59 | 47 | 74 | 57 | | | | | | |
| 9 | 10 | 62 | 9 | 28 | 0 | 2 | 36 | 12 | 36 | 12 | 5 | 29 | 88 | 47 | 93 | 55 | | | | | | |
| 9 | 17 | 62 | 12 | 3 | 0 | 2 | 22 | 10 | 22 | 10 | 29 | 14 | 92 | 23 | 121 | 27 | | | | | | |
| 9 | 25 | 62 | 10 | 18 | 0 | 0 | 19 | 10 | 19 | 10 | 5 | 27 | 57 | 39 | 62 | 47 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** COLORADO
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** SOUTH PLATTE RIVER
**STATION LOCATION** SOUTH PLATTE RIVER AT
JULESBURG, COLORADO 92

| DATE OF SAMPLE | | | ALGAE (Number per milliliter) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 4000 | 0 | 60 | 290 | 0 | 150 | 0 | 290 | 3210 | 20 | 1040 | 78 | 3 | 91 | 3 | 88 | 2 | 89 | 1 | 38 | 1 | 87 | 1 | 84 | 1 | 71 | 1 | | | | |
| 10 | 16 | 61 | 3200 | 0 | 80 | 100 | 0 | 20 | 0 | 190 | 2840 | 40 | 750 | 78 | 3 | 88 | 2 | 92 | 1 | 87 | 1 | 91 | 1 | | | | | | | | | | |
| 11 | 6 | 61 | 4400 | 0 | 20 | 270 | 0 | 60 | 0 | 190 | 3870 | 0 | 660 | 78 | 4 | 92 | 2 | 88 | 2 | 87 | 1 | 91 | 1 | 86 | 1 | 38 | 1 | 82 | 1 | | | | |
| 11 | 20 | 61 | 800 | 0 | 20 | 0 | 0 | 20 | 0 | 50 | 720 | 70 | 670 | 87 | 1 | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 1300 | 0 | 20 | 60 | 0 | 0 | 0 | 80 | 1140 | 0 | 230 | 78 | 1 | 87 | 1 | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 300 | 0 | 0 | 70 | 0 | 0 | 0 | 0 | 270 | 20 | 380 | | | | | | | | | | | | | | | | | | | | |
| 1 | 5 | 62 | 2700 | 0 | 40 | 80 | 0 | 20 | 0 | 150 | 2380 | 20 | 270 | 87 | 3 | 88 | 3 | 92 | 1 | 78 | 1 | 85 | 1 | | | | | | | | | | |
| 1 | 26 | 62 | 200 | 0 | 0 | 20 | 0 | 0 | 0 | 20 | 200 | 0 | 50 | | | | | | | | | | | | | | | | | | | | |
| 2 | 12 | 62 | 1900 | 0 | 0 | 50 | 0 | 20 | 50 | 70 | 1700 | 0 | 380 | 87 | 3 | 82 | 1 | 88 | 1 | 92 | 1 | | | | | | | | | | | | |
| 2 | 20 | 62 | 2200 | 0 | 20 | 20 | 0 | 20 | 20 | 50 | 2040 | 0 | 900 | 88 | 2 | 82 | 1 | 66 | 1 | 84 | 2 | | | | | | | | | | | | |
| 3 | 5 | 62 | 1600 | 0 | 0 | 0 | 0 | 40 | 20 | 60 | 1510 | 20 | 370 | 92 | 1 | 87 | 1 | 91 | 1 | 78 | 1 | 88 | 1 | | | | | | | | | | |
| 3 | 19 | 62 | 2900 | 0 | 0 | 50 | 0 | 140 | 0 | 160 | 2560 | 20 | 1290 | 88 | 2 | 82 | 2 | 92 | 1 | 87 | 1 | 78 | 1 | 91 | 1 | | | | | | | | |
| 4 | 2 | 62 | 7600 | 20 | 0 | 120 | 0 | 620 | 170 | 1470 | 5200 | 290 | 560 | 71 | 4 | 91 | 3 | 88 | 3 | 78 | 2 | 85 | 2 | 51 | 2 | 92 | 2 | 82 | 1 | 68 | 1 | | |
| 4 | 16 | 62 | 12000 | 0 | 20 | 310 | 0 | 560 | 0 | 370 | 10790 | 80 | 990 | 87 | 5 | 77 | 4 | 88 | 4 | 91 | 3 | 92 | 3 | 82 | 3 | 85 | 2 | 52 | 2 | 78 | 1 | 97 | 1 |
| 5 | 7 | 62 | 4600 | 0 | 0 | 40 | 0 | 60 | 0 | 720 | 3780 | 760 | 1480 | 88 | 4 | 92 | 3 | 68 | 2 | | | | | | | | | | | | | | |
| 5 | 28 | 62 | 8400 | 0 | 60 | 40 | 0 | 20 | 0 | 2420 | 5820 | 520 | 80 | 88 | 5 | 68 | 4 | 71 | 4 | 92 | 3 | 87 | 2 | 82 | 1 | 91 | 1 | 79 | 1 | | | | |
| 6 | 5 | 62 | 6100 | 0 | 20 | 20 | 0 | 40 | 0 | 520 | 5510 | 60 | 770 | 88 | 4 | 87 | 4 | 78 | 2 | 91 | 2 | 82 | 1 | 85 | 1 | 92 | 1 | 79 | 1 | | | | |
| 6 | 19 | 62 | 46000 | 80 | 250 | 13670 | 420 | 550 | 0 | 11520 | 19450 | 1770 | 7430 | 38 | 6 | 68 | 6 | 71 | 6 | 88 | 5 | 87 | 5 | 24 | 5 | 33 | 4 | 92 | 4 | 82 | 3 | 78 | 3 |
| 7 | 6 | 62 | 50000 | 250 | 590 | 3970 | 0 | 0 | 0 | 7220 | 37940 | 840 | 9880 | 88 | 7 | 87 | 6 | 68 | 6 | 92 | 6 | 91 | 5 | 38 | 5 | 79 | 4 | 86 | 4 | 24 | 3 | | |
| 7 | 16 | 62 | 36800 | 40 | 0 | 590 | 550 | 380 | 0 | 8610 | 26670 | 510 | 1010 | 88 | 8 | 68 | 6 | 87 | 4 | 69 | 3 | 50 | 2 | 51 | 2 | 38 | 1 | 71 | 1 | 24 | 1 | | |
| 8 | 6 | 62 | 18100 | 0 | 0 | 1200 | 870 | 390 | 0 | 1160 | 14450 | 580 | 2940 | 88 | 6 | 87 | 5 | 92 | 4 | 50 | 3 | 68 | 3 | 82 | 3 | 38 | 3 | 91 | 2 | 81 | 2 | 51 | 2 |
| 8 | 20 | 62 | 32700 | 0 | 460 | 1740 | 0 | 1620 | 0 | 3560 | 25380 | 290 | 1620 | 88 | 8 | 87 | 5 | 68 | 5 | 51 | 4 | 24 | 3 | 71 | 3 | 28 | 2 | 12 | 2 | 25 | 1 | | |
| 9 | 5 | 62 | 21100 | 170 | 250 | 370 | 0 | 330 | 40 | 3810 | 16150 | 290 | 2400 | 88 | 7 | 87 | 5 | 68 | 5 | 92 | 3 | 51 | 2 | 71 | 1 | 85 | 1 | 12 | 1 | 24 | 1 | | |
| 9 | 12 | 62 | 9700 | 180 | 160 | 930 | 0 | 540 | 0 | 2410 | 5500 | 1000 | 7220 | 88 | 5 | 87 | 3 | 68 | 3 | 69 | 3 | 51 | 2 | 26 | 2 | 71 | 2 | 92 | 2 | 38 | 1 | 3 | 1 |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 12 | 22 | 85 | 18 | 11 | 11 | 75 | 5 | 44 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 12 | 26 | 92 | 8 | 71 | 8 | 55 | 5 | 53 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 12 | 35 | 92 | 12 | 54 | 5 | 71 | 4 | 44 | 1120 | 0 | 6 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 12 | 29 | 46 | 8 | 65 | 6 | 36 | 5 | 52 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 12 | 24 | 46 | 10 | 92 | 7 | 36 | 6 | 53 | 80 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 36 | 15 | 92 | 14 | 46 | 5 | 71 | 5 | 61 | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 5 | 62 | | | | | | | | | | 500 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 26 | 62 | 64 | 16 | 71 | 15 | 12 | 10 | 70 | 8 | 51 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 2 | 12 | 62 | | | | | | | | | | 270 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 2 | 20 | 62 | 46 | 11 | 36 | 10 | 12 | 7 | 11 | 7 | 65 | 90 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 92 | 12 | 12 | 11 | 85 | 9 | 46 | 5 | 63 | 80 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 71 | 17 | 36 | 13 | 92 | 10 | 12 | 9 | 51 | 410 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 86 | 14 | 71 | 10 | 12 | 9 | 65 | 8 | 59 | 410 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 4 | 16 | 62 | 65 | 19 | 86 | 10 | 36 | 6 | 71 | 6 | 59 | 310 | 0 | 1 | | | | | | | | | | | 16 | 76 | 3 | 50 | 1 | | | 1 | 0 |
| 5 | 7 | 62 | 71 | 20 | 65 | 13 | 92 | 10 | 72 | 9 | 48 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 5 | 28 | 62 | 71 | 35 | 92 | 16 | 72 | 5 | 46 | 5 | 39 | - | - | - | | | | | | | | | | | - | | | | | | | - | - |
| 6 | 5 | 62 | 71 | 16 | 72 | 12 | 65 | 12 | 12 | 6 | 54 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 19 | 62 | 71 | 14 | 58 | 12 | 65 | 7 | 92 | 6 | 61 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 7 | 6 | 62 | 71 | 11 | 58 | 10 | 92 | 8 | 72 | 7 | 64 | 0 | 0 | 8 | 2 | 1 | | | | | | | | | 24 | 77 | 2 | 76 | 2 | 5 | 1 | 0 | 4 |
| 7 | 16 | 62 | 67 | 50 | 70 | 14 | 26 | 14 | 23 | 4 | 18 | 0 | 0 | 6 | | | | | | | | | | | 6 | 50 | 1 | | | | | 0 | 4 |
| 8 | 6 | 62 | 71 | 20 | 71 | 7 | 92 | 7 | 26 | 4 | 62 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 70 | 57 | 67 | 25 | 26 | 7 | 65 | 4 | 7 | 0 | 0 | 227 | 6 | 5 | 11 | 3 | 22 | 3 | 15 | 2 | 16 | 2 | 12 | 51 | 2 | 50 | 1 | 76 | 1 | 0 | 3 |
| 9 | 5 | 62 | 70 | 54 | 26 | 15 | 65 | 9 | 66 | 6 | 16 | 0 | 0 | 197 | 6 | 4 | 22 | 4 | 13 | 3 | 2 | 3 | 16 | 2 | 15 | 50 | 2 | 51 | 1 | 76 | 1 | 3 | 0 |
| 9 | 12 | 62 | 70 | 42 | 67 | 19 | 26 | 9 | 65 | 8 | 22 | 0 | 0 | 107 | 13 | 5 | 2 | 2 | | | | | | | 7 | 50 | 1 | 76 | 1 | | | 3 | 1 |

***RESULTS IN MICROGRAMS PER LITER***
*(Parts per billion)*

**STATION LOCATION** SOUTH PLATTE RIVER AT
JULESBURG, COLORADO

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 24 | 61 | 11 | 20 | 4800# | 259 | 32 | 227 | 0 | 6 | 14 | 1 | 1 | 12 | 0 | 5 | 1 | 1 | |
| 11 | 20 | 61 | 12 | 12 | 5280# | 224 | 25 | 199 | 1 | 6 | 8 | 1 | 1 | 6 | 0 | 3 | 1 | 1 | |
| 2 | 14 | 62 | 2 | 26 | 5760 | 243 | 50 | 193 | 4 | 13 | 14 | 1 | 1 | 11 | 1 | 7 | 5 | 1 | |
| 3 | 19 | 62 | 4 | 2 | 6720# | 212 | 39 | 173 | 2 | 8 | 14 | 1 | 0 | 12 | 1 | 5 | 2 | 1 | |
| 4 | 30 | 62 | 5 | 7 | 4774 | 152 | 44 | 108 | 6 | 13 | 6 | 1 | 0 | 5 | 0 | 4 | 5 | 0 | |
| 6 | 8 | 62 | 6 | 19 | 5200# | 137 | 47 | 90 | 1 | 12 | 12 | 1 | 1 | 9 | 1 | 6 | 5 | 1 | |
| 7 | 18 | 62 | 7 | 26 | 4320# | 145 | 37 | 108 | 2 | 10 | 7 | 1 | 1 | 5 | 0 | 4 | 3 | 0 | |
| 8 | 27 | 62 | 9 | 5 | 4320# | 198 | 24 | 174 | 1 | 7 | 5 | 1 | 1 | 3 | 0 | 3 | 2 | 1 | |

# ESTIMATED

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** COLORADO

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** SOUTH PLATTE RIVER

**STATION LOCATION** SOUTH PLATTE RIVER AT
JULESBURG, COLORADO 92

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 11 | 6 | 61 | 4.4 | 10.6 | 7.9 | - | - | - | - | - | - | - | - | 17 | 190 | - | - | - | - |
| 11 | 14 | 61 | 4.4 | 11.7 | 7.6 | - | - | - | - | - | - | - | - | 20 | 170 | - | - | - | - |
| 11 | 21 | 61 | 3.3 | 11.6 | 7.6 | - | 30 | - | - | - | - | - | - | 15 | 180 | - | - | - | - |
| 11 | 29 | 61 | 5.0 | 10.0 | 7.6 | - | - | - | - | - | - | - | - | 18 | 140 | - | - | - | - |
| 12 | 4 | 61 | 4.4 | 8.9 | 7.6 | - | - | - | - | - | - | - | - | 6 | 140 | - | - | - | - |
| 12 | 11 | 61 | 1.1 | - | 7.5 | - | 18 | - | - | - | - | - | - | 4 | 70 | - | - | - | - |
| 12 | 18 | 61 | 1.1 | 7.2 | 7.6 | - | - | - | - | - | - | - | - | 3 | 25 | - | - | - | 16000 |
| 12 | 26 | 61 | 1.1 | 9.0 | 7.6 | 3.5 | - | - | - | - | - | - | - | 15 | 110 | - | - | - | - |
| 1 | 22 | 62 | 1.1 | 8.7 | 7.6 | - | - | - | - | - | - | - | - | 3 | 25 | - | - | - | 500 |
| 1 | 29 | 62 | 3.9 | 9.5 | 7.6 | - | - | - | - | - | - | - | - | 4 | 150 | - | - | - | 1100 |
| 2 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *330 |
| 2 | 26 | 62 | 1.1 | - | 7.6 | - | 11 | - | - | - | - | - | - | 5 | 100 | - | - | - | *110 |
| 3 | 5 | 62 | 5.0 | 8.3 | 7.6 | 1.6 | - | - | - | - | - | - | - | - | 130 | - | - | - | 100 |
| 3 | 12 | 62 | 3.3 | 10.2 | 7.6 | - | - | - | - | - | - | - | - | 5 | 180 | - | - | - | *110 |
| 3 | 19 | 62 | 10.0 | 8.9 | 7.6 | 1.3 | - | - | - | - | - | - | - | 5 | 200 | - | - | - | 110 |
| 3 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *110 |
| 4 | 2 | 62 | 7.2 | 10.5 | 7.6 | - | 19 | - | - | - | - | - | - | 2 | 270 | - | - | - | *110 |
| 4 | 9 | 62 | 10.0 | 10.7 | 7.6 | - | - | - | - | - | - | - | - | 3 | 200 | - | - | - | 170 |
| 4 | 17 | 62 | 13.3 | 9.2 | 7.6 | 3.0 | - | - | - | - | - | - | - | 4 | 160 | - | - | - | 1300 |
| 4 | 23 | 62 | 16.6 | 8.1 | 7.6 | - | - | - | - | - | - | - | - | 4 | 30 | - | - | - | 3300 |
| 4 | 30 | 62 | 15.0 | 14.1 | 7.6 | - | - | - | - | - | - | - | - | 14 | 120 | - | - | - | 440 |
| 5 | 7 | 62 | 21.1 | 10.1 | 7.6 | - | 4 | - | - | - | - | - | - | 12 | 320 | - | - | - | - |
| 5 | 14 | 62 | 22.2 | 8.9 | 7.6 | 5.0 | - | - | - | - | - | - | - | 15 | 1000 | - | - | - | 7300 |
| 5 | 28 | 62 | 15.5 | 7.1 | 7.6 | 6.1 | - | - | - | - | - | - | - | 20 | 1800 | - | - | - | - |
| 6 | 20 | 62 | 25.5 | 8.3 | 7.6 | 3.2 | 18 | - | - | - | - | - | - | 10 | 280 | - | - | - | 2800 |
| 6 | 9 | 62 | 16.7 | 8.5 | 7.6 | 4.0 | - | - | - | - | - | - | - | 10 | 800 | - | - | - | - |
| 6 | 11 | 62 | 17.8 | 6.9 | 7.6 | 1.3 | - | - | - | - | - | - | - | 6 | 460 | - | - | - | 1000 |
| 6 | 26 | 62 | 25.5 | - | 7.6 | - | - | - | - | - | 57 | 240 | 648 | 5 | 95 | 675 | .2 | 1390 | 100 |
| 7 | 9 | 62 | 31.1 | 4.9 | 7.6 | 4.2 | - | - | - | - | 66 | 224 | - | 5 | 2400 | 750 | .9 | 1480 | 6000 |
| 7 | 16 | 62 | 24.4 | 7.2 | 7.6 | - | - | - | - | - | 61 | 224 | 710 | 1 | 10 | - | .0 | 1350 | 100 |
| 7 | 23 | 62 | 24.4 | 7.0 | 7.6 | 4.9 | - | - | - | - | - | - | - | 6 | 1000 | - | - | - | *100 |
| 7 | 30 | 62 | 26.6 | 10.1 | 7.6 | 8.1 | - | - | - | - | 48 | 174 | 572 | 10 | 160 | 613 | .0 | 1369 | - |
| 8 | 6 | 62 | 26.6 | 6.9 | 7.6 | 2.5 | - | - | - | - | - | - | - | 4 | 600 | - | - | - | 3800 |
| 8 | 13 | 62 | 23.3 | 6.9 | 7.6 | .9 | - | - | - | - | - | - | - | 5 | 20 | - | - | - | *100 |
| 8 | 20 | 62 | 26.6 | 9.0 | 7.6 | 2.8 | - | - | - | - | - | - | - | 5 | 20 | - | - | - | - |
| 8 | 27 | 62 | 24.4 | 5.5 | 7.6 | 1.9 | - | - | - | - | - | - | - | 5 | 20 | - | - | - | 400 |
| 8 | 28 | 62 | - | - | - | - | - | - | - | - | 56 | 202 | 600 | - | - | 612 | .0 | 1350 | - |
| 9 | 5 | 62 | 21.1 | 11.4 | 7.6 | - | 26 | - | - | - | 66 | 200 | 620 | 3 | 15 | 650 | .0 | 1370 | 22000 |

ONAL WATER QUALITY NETWORK

## CAL AND BACTERIOLOGICAL ANALYSES

**STATE** COLORADO

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** SOUTH PLATTE RIVER

**STATION LOCATION** SOUTH PLATTE RIVER AT
JULESBURG, COLORADO

| B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | CO per |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| - | - | - | - | - | 67 | 196 | 630 | - | - | 700 | .0 | 1400 | |
| - | - | - | - | - | 64 | 200 | 610 | 5 | 25 | 675 | .0 | 1365 | |
| 1.6 | - | - | - | - | 40 | 210 | 630 | - | - | 660 | - | 1520 | |

# POPULATION

**MAJOR BASIN** PACIFIC NORTHWEST

**MINOR BASIN** SPOKANE RIVER

**STATION LOCATION** SPOKANE RIVER AT
POST FALLS DAM, IDAHO

| ALGAE *(Number per milliliter)* | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Code* | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | |
| | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 0 | 250 | 0 | 250 | 0 | 1240 | 4970 | 0 | 270 | 77 | 4 | 92 | 4 | 69 | 3 | 57 | 1 | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 840 | 3610 | 270 | 680 | 84 | 4 | 77 | 4 | 69 | 2 | 92 | 2 | 71 | 2 | | | | | | | | |
| 0 | 60 | 0 | 80 | 20 | 870 | 2670 | 40 | 170 | 77 | 3 | 92 | 3 | 69 | 3 | 88 | 1 | | | | | | | | | | |
| 0 | 40 | 0 | 170 | 0 | 170 | 400 | 20 | 170 | 57 | 1 | | | | | | | | | | | | | | | | |
| 0 | 60 | 0 | 0 | 0 | 0 | 80 | 40 | 170 | | | | | | | | | | | | | | | | | | |
| 0 | 0 | 0 | 270 | 0 | 0 | 40 | 0 | 0 | 51 | 1 | | | | | | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 20 | 130 | 0 | 40 | | | | | | | | | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 0 | 550 | 380 | 210 | 380 | 71 | 1 | 68 | 1 | 84 | 1 | 93 | 1 | | | | | | | | | | |
| 0 | 0 | 0 | 0 | 40 | 0 | 360 | 10 | 30 | 92 | 1 | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 5 | 14 | 62 | 61 | 48 | 47 | 28 | 9 | 20 | 92 | 2 | 2 | 0 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 1 | 62 | 61 | 54 | 47 | 20 | 9 | 16 | 92 | 3 | 7 | 0 | 0 | 6 | | | | | | | | | | | 4 | | | | | | | 0 | 0 |
| 6 | 13 | 62 | 61 | 58 | 47 | 22 | 9 | 9 | 95 | 4 | 7 | 0 | 0 | 13 | 11 | 1 | | | | | | | | | 3 | | | | | | | 0 | 0 |
| 6 | 28 | 62 | 47 | 48 | 61 | 22 | 92 | 16 | 9 | 5 | 9 | 20 | 0 | 20 | 11 | 1 | 17 | 1 | 46 | 1 | | | | | 2 | | | | | | | 0 | 0 |
| 7 | 11 | 62 | 47 | 64 | 95 | 10 | 61 | 9 | 2 | 3 | 14 | 0 | 0 | 72 | 17 | 4 | 11 | 2 | 46 | 1 | | | | | 7 | 51 | 1 | 76 | 1 | | | 0 | 0 |
| 8 | 1 | 62 | 47 | 24 | 95 | 13 | 9 | 10 | 2 | 9 | 44 | 0 | 0 | 72 | 17 | 3 | 11 | 2 | 21 | 2 | 16 | 1 | | | 24 | 50 | 3 | 51 | 2 | | | 0 | 0 |
| 8 | 16 | 62 | 95 | 42 | 47 | 31 | 46 | 3 | 61 | 3 | 21 | 0 | 0 | 72 | 17 | 4 | 11 | 3 | | | | | | | 39 | 50 | 4 | 76 | 3 | | | 0 | 0 |
| 8 | 31 | 62 | 47 | 47 | 95 | 17 | 61 | 8 | 9 | 5 | 23 | 0 | 0 | 63 | 11 | 3 | 17 | 3 | 22 | 1 | | | | | 27 | 50 | 4 | | | | | 0 | 0 |
| 9 | 17 | 62 | 95 | 35 | 9 | 29 | 47 | 28 | 61 | 2 | 6 | 0 | 0 | 36 | 17 | 1 | 22 | 1 | 11 | 1 | 5 | 1 | | | 6 | 50 | 1 | 76 | 1 | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** IDAHO
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** SPOKANE RIVER
**STATION LOCATION** SPOKANE RIVER AT
POST FALLS DAM, IDAHO 114

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 5 | 14 | 62 | 6 | 25 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 5 | 6 | 5 | 14 | 7 | | | | | | |
| 5 | 21 | 62 | 6 | 27 | 0 | 1 | 0 | 0 | 0 | 1 | 7 | 5 | 6 | 4 | 13 | 6 | | | | | | |
| 5 | 28 | 62 | 7 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 9 | 6 | 9 | 5 | 18 | 8 | | | | | | |
| 6 | 4 | 62 | 7 | 6 | 0 | 0 | 0 | 1 | 0 | 1 | 8 | 5 | 5 | 6 | 13 | 8 | | | | | | |
| 6 | 11 | 62 | 7 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 3 | 4 | 4 | 7 | 5 | | | | | | |
| 6 | 18 | 62 | 8 | 13 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 5 | 7 | 6 | 8 | 7 | | | | | | |
| 6 | 25 | 62 | 7 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 6 | 5 | 5 | 15 | 7 | | | | | | |
| 7 | 2 | 62 | 7 | 30 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 6 | 6 | 6 | 7 | 8 | | | | | | |
| 7 | 16 | 62 | 8 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 8 | 5 | 13 | 5 | 21 | 7 | | | | | | |
| 7 | 23 | 62 | 8 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 6 | 7 | 5 | 7 | 7 | | | | | | |
| 7 | 30 | 62 | 8 | 23 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 5 | 5 | 5 | 9 | 7 | | | | | | |
| 8 | 6 | 62 | 8 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 6 | 9 | 6 | 18 | 8 | | | | | | |
| 8 | 13 | 62 | 8 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 6 | 5 | 8 | 7 | | | | | | |
| 8 | 20 | 62 | 9 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 8 | 5 | 8 | 7 | | | | | | |
| 8 | 27 | 62 | 9 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 7 | 6 | 8 | 8 | | | | | | |
| 9 | 4 | 62 | 9 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 11 | 6 | 17 | 8 | | | | | | |
| 9 | 11 | 62 | 10 | 4 | 1 | 2 | 0 | 0 | 1 | 2 | 4 | 11 | 4 | 6 | 8 | 13 | | | | | | |
| 9 | 18 | 62 | 10 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 10 | 4 | 13 | 6 | | | | | | |
| 9 | 24 | 62 | 10 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 6 | 7 | 5 | 15 | 8 | | | | | | |

**STATION LOCATION** SPOKANE RIVER AT

POST FALLS DAM, IDAHO 114

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 8 | 30 | 62 | 9 | 7 | 5000 | 110 | 43 | 67 | 0 | 12 | 16 | 2 | 1 | 13 | 0 | 5 | 4 | 1 | 5 |
| 9 | 28 | 62 | 10 | 6 | 5000 | 118 | 44 | 74 | 1 | 13 | 11 | 1 | 1 | 9 | 0 | 5 | 4 | 1 | 9 |

**MINOR BASIN** SPOKANE RIVFR

**STATION LOCATION** SPOKANE RIVER AT

POST FALLS DAM, IDAHO 114

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 5 | 28 | 62 | - | - | - | - | - | - | - | - | 3 | - | - | - | 0 | - | - | - | - |
| 6 | 4 | 62 | - | - | - | - | - | - | - | - | 3 | 24 | 24 | 5 | 25 | 10 | - | - | - |
| 7 | 2 | 62 | - | - | 7.2 | - | - | - | - | - | 2 | 18 | 28 | 5 | *25 | 8 | .0 | - | - |
| 7 | 23 | 62 | - | - | 7.7 | - | - | - | - | - | 1 | 20 | - | 5 | *25 | 5 | .0 | 47 | - |
| 7 | 30 | 62 | - | - | 7.6 | - | - | - | - | - | 5 | 20 | 24 | 0 | *25 | 6 | - | - | - |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | 5 | 24 | 28 | 0 | 25 | - | .1 | - | - |
| 9 | 11 | 62 | - | - | - | - | - | - | - | - | 2 | 20 | 24 | 0 | *25 | 6 | .0 | 47 | - |
| 9 | 18 | 62 | - | - | - | - | - | - | - | - | 3 | 20 | 24 | 5 | *25 | 7 | .0 | 50 | - |
| 9 | 24 | 62 | - | - | 7.2 | - | 9 | - | - | - | 3 | 20 | 40 | 5 | 0 | 7 | .0 | 34 | - |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Post Falls, Idaho
Data Supplied by U.S. Geological Survey

MAJOR BASIN Pacific Northwest
MINOR BASIN Spokane River
STATION LOCATION Spokane River at Post Falls Dam, Idaho

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.300 | .700 | 2.000 | 1.100 | 4.100 | 4.700 | 9.200 | 21.600 | 17.100 | 2.700 | .700 | .200 |
| 2 | 1.300 | 1.500 | 2.000 | 1.400 | 3.900 | 5.200 | 9.400 | 20.600 | 16.500 | 2.000 | .700 | .200 |
| 3 | 1.400 | 2.000 | 2.000 | 1.400 | 4.300 | 5.100 | 9.500 | 19.800 | 16.100 | 2.100 | .400 | .200 |
| 4 | 1.400 | 2.000 | 2.000 | 1.200 | 4.200 | 4.400 | 10.400 | 19.600 | 15.700 | 2.800 | .200 | .200 |
| 5 | 1.400 | 2.000 | 2.000 | 1.400 | 4.200 | 4.000 | 11.200 | 19.600 | 15.100 | 1.800 | .700 | .200 |
| 6 | 1.100 | 2.000 | 2.000 | 1.400 | 3.800 | 4.100 | 12.500 | 19.600 | 14.500 | 1.800 | .400 | .200 |
| 7 | 1.100 | 2.000 | 2.000 | 1.400 | 4.200 | 4.000 | 14.700 | 19.600 | 13.900 | 1.900 | .600 | .200 |
| 8 | 1.100 | 2.000 | 2.000 | 3.500 | 4.200 | 3.800 | 17.500 | 19.600 | 13.200 | 1.900 | .800 | .200 |
| 9 | 1.100 | 2.000 | 2.000 | 3.800 | 4.400 | 3.800 | 19.200 | 19.700 | 12.700 | 2.700 | .800 | .200 |
| 10 | 1.100 | 2.000 | 2.000 | 4.800 | 4.500 | 3.600 | 19.600 | 20.000 | 12.300 | 2.400 | .800 | .200 |
| 11 | 1.400 | 2.000 | 2.000 | 4.900 | 4.700 | 3.400 | 19.500 | 20.600 | 11.900 | 1.700 | .800 | 1.300 |
| 12 | .800 | 2.000 | 1.600 | 4.900 | 5.000 | 3.200 | 18.900 | 20.900 | 11.500 | 1.400 | .800 | 1.000 |
| 13 | .200 | 2.000 | 1.800 | 4.100 | 5.400 | 3.300 | 18.500 | 21.100 | 11.100 | 1.500 | .800 | .200 |
| 14 | .200 | 2.000 | 2.100 | 4.600 | 5.800 | 3.100 | 18.400 | 21.000 | 7.800 | 1.500 | .700 | .200 |
| 15 | .800 | 2.000 | 2.100 | 5.300 | 6.100 | 2.900 | 18.700 | 20.800 | 8.100 | 1.000 | .300 | .700 |
| 16 | 1.600 | 2.000 | 2.100 | 4.900 | 6.000 | 2.900 | 19.600 | 20.400 | 8.200 | .800 | .200 | .300 |
| 17 | .700 | 2.000 | 1.400 | 4.700 | 6.700 | 2.900 | 20.400 | 20.000 | 6.400 | .800 | 1.900 | .100 |
| 18 | .200 | 2.000 | 2.000 | 4.700 | 6.900 | 2.800 | 21.100 | 19.700 | 3.900 | .800 | 1.300 | .100 |
| 19 | .200 | 2.000 | 1.400 | 4.700 | 7.100 | 2.700 | 21.900 | 19.500 | 2.900 | .800 | 1.200 | .200 |
| 20 | .200 | 2.000 | 1.400 | 4.600 | 7.100 | 2.800 | 23.000 | 19.300 | 2.800 | .800 | .200 | .800 |
| 21 | .200 | 2.000 | 1.200 | 4.600 | 7.200 | 2.600 | 24.000 | 19.000 | 2.700 | .800 | .200 | .700 |
| 22 | .200 | 2.000 | 1.700 | 4.800 | 7.200 | 3.200 | 24.500 | 18.700 | 1.700 | .800 | .200 | .700 |
| 23 | .800 | 2.000 | 1.300 | 4.800 | 7.000 | 2.700 | 24.400 | 18.300 | 1.500 | .800 | .200 | .300 |
| 24 | 1.100 | 2.000 | 1.200 | 4.500 | 6.800 | 3.800 | 24.300 | 18.200 | 1.600 | .800 | .200 | .200 |
| 25 | .800 | 2.000 | 1.200 | 4.400 | 6.500 | 3.800 | 24.400 | 18.300 | 2.100 | .800 | .200 | .200 |
| 26 | .700 | 2.000 | 1.200 | 4.400 | 6.000 | 5.000 | 24.500 | 18.300 | 2.700 | .800 | .200 | .800 |
| 27 | .600 | 2.000 | 1.500 | 4.300 | 5.500 | 6.600 | 24.500 | 18.300 | 2.700 | .800 | .200 | .800 |
| 28 | .600 | 2.000 | 1.700 | 4.300 | 4.900 | 8.300 | 24.100 | 18.200 | 2.700 | .800 | .200 | 1.500 |
| 29 | .600 | 2.030 | 1.500 | 4.300 |  | 9.000 | 23.400 | 18.200 | 2.700 | .800 | .200 | 1.400 |
| 30 | 1.000 | 2.000 | 1.100 | 4.200 |  | 9.200 | 22.500 | 17.900 | 2.700 | .800 | .200 | 1.200 |
| 31 | .800 |  | 1.100 | 4.100 |  | 10.100 |  | 17.600 |  | .800 | .200 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** MARYLAND
**MAJOR BASIN** NORTH ATLANTIC
**MINOR BASIN** SUSQUEHANNA-JUNIATA
**STATION LOCATION** SUSQUEHANNA RIVER AT
CONOWINGO, MARYLAND 75

| DATE SAMPLE TAKEN | | | DATE OF DETERMINATION | | RADIOACTIVITY IN WATER | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 4 | 61 | 10 | 18 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 4 | 5 | 5 | 6 | 6 | | | | | | |
| 10 | 11 | 61 | 10 | 31 | - | - | - | - | - | - | 7 | 5 | 8 | 7 | 15 | 9 | | | | | | |
| 10 | 18 | 61 | 10 | 31 | - | - | - | - | - | - | 6 | 5 | 2 | 7 | 8 | 9 | | | | | | |
| 10 | 25 | 61 | 11 | 9 | - | - | - | - | - | - | 6 | 5 | 7 | 7 | 13 | 9 | | | | | | |
| 11 | 3 | 61 | 12 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 4 | 12 | 6 | 15 | 8 | | | | | | |
| 11 | 15 | 61 | 11 | 28 | - | - | - | - | - | - | 3 | 6 | 11 | 8 | 14 | 10 | | | | | | |
| 11 | 22 | 61 | 12 | 5 | - | - | - | - | - | - | 0 | 4 | 10 | 6 | 10 | 8 | | | | | | |
| 11 | 29 | 61 | 12 | 8 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 6 | 28 | 8 | 31 | 10 | | | | | | |
| 12 | 6 | 61 | 12 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 12 | 4 | 32 | 6 | 44 | 8 | | | | | | |
| 12 | 13 | 61 | 12 | 21 | - | - | - | - | - | - | 10 | 5 | 24 | 7 | 34 | 9 | | | | | | |
| 12 | 20 | 61 | 12 | 29 | - | - | - | - | - | - | 8 | 6 | 20 | 7 | 28 | 9 | | | | | | |
| 12 | 27 | 61 | 1 | 8 | - | - | - | - | - | - | 13 | 6 | 24 | 7 | 37 | 9 | | | | | | |
| 1 | 3 | 62 | 1 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 24 | 5 | 44 | 6 | 68 | 8 | | | | | | |
| 1 | 6 | 62 | 1 | 17 | - | - | - | - | - | - | 22 | 6 | 31 | 7 | 53 | 9 | | | | | | |
| 1 | 12 | 62 | 1 | 22 | - | - | - | - | - | - | 24 | 6 | 24 | 7 | 48 | 9 | | | | | | |
| 1 | 15 | 62 | 2 | 7 | - | - | - | - | - | - | 27 | 4 | 19 | 5 | 46 | 7 | | | | | | |
| 1 | 24 | 62 | 2 | 5 | - | - | - | - | - | - | 28 | 6 | 27 | 6 | 55 | 8 | | | | | | |
| 1 | 31 | 62 | 2 | 9 | - | - | - | - | - | - | 14 | 6 | 24 | 7 | 38 | 9 | | | | | | |
| 2 | 7 | 62 | 2 | 16 | 0 | 1 | 0 | 1 | 0 | 1 | 9 | 4 | 23 | 5 | 32 | 7 | | | | | | |
| 2 | 20 | 62 | 3 | 5 | - | - | - | - | - | - | 1 | 5 | 14 | 7 | 15 | 9 | | | | | | |
| 2 | 28 | 62 | 3 | 14 | - | - | - | - | - | - | 81 | 8 | 52 | 7 | 133 | 11 | | | | | | |
| 3 | 8 | 62 | 3 | 20 | 0 | 1 | 1 | 1 | 1 | 1 | 60 | 7 | 25 | 7 | 85 | 10 | | | | | | |
| 3 | 14 | 62 | 4 | 17 | - | - | - | - | - | - | 50 | 8 | 24 | 6 | 74 | 10 | | | | | | |
| 3 | 21 | 62 | 4 | 3 | - | - | - | - | - | - | 39 | 6 | 30 | 6 | 69 | 8 | | | | | | |
| 3 | 28 | 62 | 4 | 11 | - | - | - | - | - | - | 32 | 6 | 13 | 6 | 45 | 8 | | | | | | |
| 4 | 4 | 62 | 4 | 19 | 3 | 1 | 0 | 0 | 3 | 1 | 41 | 6 | 22 | 5 | 63 | 7 | | | | | | |
| 4 | 11 | 62 | 4 | 26 | - | - | - | - | - | - | 23 | 6 | 12 | 6 | 35 | 8 | | | | | | |
| 4 | 18 | 62 | 5 | 1 | - | - | - | - | - | - | 13 | 6 | 14 | 6 | 27 | 8 | | | | | | |
| 4 | 28 | 62 | 5 | 25 | - | - | - | - | - | - | 4 | 6 | 8 | 7 | 12 | 9 | | | | | | |
| 5 | 2 | 62 | 6 | 25 | - | - | - | - | - | - | 6 | 5 | 8 | 5 | 14 | 7 | | | | | | |
| 5 | 9 | 62 | 6 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 5 | 6 | 6 | 8 | 7 | | | | | | |
| 5 | 16 | 62 | 6 | 21 | - | - | - | - | - | - | 6 | 6 | 31 | 8 | 37 | 10 | | | | | | |
| 5 | 23 | 62 | 6 | 27 | - | - | - | - | - | - | 0 | 6 | 6 | 7 | 6 | 9 | | | | | | |
| 5 | 31 | 62 | 7 | 3 | - | - | - | - | - | - | 0 | 6 | 8 | 7 | 8 | 9 | | | | | | |
| 6 | 6 | 62 | 7 | 9 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 13 | 13 | 7 | 13 | 15 | | | | | | |
| 6 | 13 | 62 | 7 | 13 | - | - | - | - | - | - | 6 | 3 | 21 | 5 | 27 | 6 | | | | | | |
| 6 | 20 | 62 | 7 | 20 | - | - | - | - | - | - | 1 | 3 | 17 | 4 | 18 | 5 | | | | | | |
| 6 | 27 | 62 | 7 | 30 | - | - | - | - | - | - | 1 | 6 | 8 | 8 | 9 | 10 | | | | | | |
| 7 | 25 | 62 | 8 | 21 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 5 | 18 | 7 | 24 | 8 | | | | | | |
| 8 | 1 | 62 | 10 | 12 | - | - | - | - | - | - | 3 | 5 | 16 | 8 | 19 | 9 | | | | | | |
| 8 | 8 | 62 | 8 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 5 | 13 | 7 | 20 | 9 | | | | | | |

# RADIOACTIVITY DETERMINATIONS

**MAJOR BASIN** NORTH ATLANTIC
**MINOR BASIN** SUSQUEHANNA-JUNIATA
**STATION LOCATION** SUSQUEHANNA RIVER AT
CONOWINGO, MARYLAND

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 15 | 62 | 9 | 5 | - | - | - | - | - | - | 0 | 3 | 8 | 4 | 8 | 5 | | | | | | | |
| 8 | 22 | 62 | 9 | 11 | - | - | - | - | - | - | 3 | 6 | 11 | 9 | 14 | 11 | | | | | | | |
| 8 | 29 | 62 | 9 | 17 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 5 | 17 | 8 | 17 | 9 | | | | | | | |
| 9 | 5 | 62 | 9 | 27 | 0 | 0 | 1 | 1 | 1 | 1 | 8 | 7 | 22 | 10 | 30 | 12 | | | | | | | |
| 9 | 10 | 62 | 10 | 9 | - | - | - | - | - | - | 1 | 6 | 15 | 10 | 16 | 13 | | | | | | | |
| 9 | 19 | 62 | 10 | 16 | - | - | - | - | - | - | 0 | 6 | 17 | 9 | 17 | 11 | | | | | | | |
| 9 | 26 | 62 | 10 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 5 | 17 | 8 | 26 | 9 | | | | | | | |

**STATION LOCATION** SUSQUEHANNA RIVER AT
CONOWINGO, MARYLAND

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes* | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 4 | 61 | 600 | 0 | 0 | 60 | 0 | 60 | 0 | 270 | 210 | 60 | 60 | 68 | 1 | | | | | | | | | | | | | | | | |
| 10 | 18 | 61 | 100 | 0 | 0 | 20 | 0 | 0 | 0 | 40 | 20 | 20 | 0 | | | | | | | | | | | | | | | | | | |
| 11 | 1 | 61 | 300 | 0 | 0 | 60 | 0 | 20 | 0 | 100 | 80 | 60 | 20 | | | | | | | | | | | | | | | | | | |
| 11 | 15 | 61 | 200 | 0 | 0 | 20 | 0 | 20 | 0 | 20 | 90 | 50 | 20 | | | | | | | | | | | | | | | | | | |
| 12 | 6 | 61 | 1600 | 0 | 0 | 270 | 0 | 630 | 160 | 380 | 160 | 130 | 220 | 51 | 2 | 71 | 1 | 57 | 1 | 38 | 1 | | | | | | | | | | |
| 12 | 27 | 61 | 300 | 0 | 0 | 100 | 0 | 20 | 0 | 100 | 100 | 0 | 80 | | | | | | | | | | | | | | | | | | |
| 1 | 3 | 62 | 1200 | 20 | 0 | 0 | 0 | 160 | 0 | 270 | 720 | 50 | 70 | 73 | 1 | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 1400 | 90 | 0 | 90 | 0 | 70 | 0 | 410 | 790 | 90 | 230 | 71 | 1 | 88 | 1 | 87 | 1 | | | | | | | | | | | | |
| 2 | 7 | 62 | 300 | 0 | 0 | 60 | 0 | 20 | 0 | 100 | 80 | 60 | 100 | | | | | | | | | | | | | | | | | | |
| 2 | 28 | 62 | 700 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 690 | 90 | 1120 | 92 | 1 | | | | | | | | | | | | | | | | |
| 3 | 7 | 62 | 700 | 0 | 0 | 20 | 0 | 0 | 0 | 100 | 540 | 40 | 40 | 92 | 1 | | | | | | | | | | | | | | | | |
| 3 | 21 | 62 | 1800 | 0 | 0 | 0 | 0 | 20 | 0 | 40 | 1740 | 40 | 480 | 92 | 2 | 82 | 1 | 85 | 1 | | | | | | | | | | | | |
| 4 | 4 | 62 | 1700 | 0 | 0 | 40 | 0 | 60 | 40 | 210 | 1370 | 120 | 290 | 92 | 2 | 82 | 1 | | | | | | | | | | | | | | |
| 4 | 18 | 62 | 6400 | 460 | 0 | 110 | 0 | 40 | 0 | 520 | 5280 | 170 | 1370 | 92 | 3 | 87 | 3 | 85 | 3 | 82 | 2 | 68 | 2 | 81 | 2 | 73 | 2 | 3 | 2 | 88 | 2 |
| 5 | 2 | 62 | 2500 | 0 | 60 | 320 | 0 | 40 | 110 | 1220 | 760 | 2130 | 720 | 68 | 3 | 77 | 2 | 71 | 2 | 92 | 1 | | | | | | | | | | |
| 5 | 15 | 62 | 10100 | 0 | 0 | 580 | 0 | 120 | 80 | 3060 | 6290 | 750 | 2110 | 77 | 5 | 68 | 5 | 88 | 4 | 92 | 3 | 87 | 1 | 71 | 1 | 38 | 1 | 81 | 1 | 40 | 1 |
| 5 | 23 | 62 | 3500 | 0 | 40 | 950 | 0 | 40 | 0 | 1010 | 1410 | 1480 | 990 | 68 | 3 | 92 | 3 | 24 | 2 | 77 | 2 | 38 | 1 | 40 | 1 | 88 | 1 | | | | |
| 6 | 6 | 62 | 800 | 0 | 0 | 130 | 0 | 0 | 0 | 420 | 250 | 40 | 380 | 68 | 2 | | | | | | | | | | | | | | | | |
| 6 | 20 | 62 | 800 | 0 | 0 | 150 | 0 | 100 | 150 | 150 | 230 | 80 | 60 | | | | | | | | | | | | | | | | | | |
| 7 | 11 | 62 | 2900 | 2650 | 0 | 0 | 0 | 0 | 40 | 120 | 80 | 0 | 0 | 4 | 5 | | | | | | | | | | | | | | | | |
| 7 | 18 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 80 | 210 | 250 | | | | | | | | | | | | | | | | | | |
| 8 | 1 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 330 | 40 | 80 | | | | | | | | | | | | | | | | | | |
| 8 | 15 | 62 | 300 | 40 | 0 | 0 | 0 | 0 | 40 | 170 | 40 | 40 | 40 | | | | | | | | | | | | | | | | | | |
| 9 | 5 | 62 | 500 | 0 | 0 | 40 | 0 | 0 | 0 | 370 | 80 | 40 | 80 | 67 | 2 | | | | | | | | | | | | | | | | |
| 9 | 19 | 62 | 100 | 0 | 30 | 20 | 0 | 20 | 0 | 20 | 0 | 20 | 90 | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 4 | 61 | 58 | 32 | 26 | 22 | 82 | 9 | 56 | 5 | 32 | 0 | 0 | 25 | 17 | 1 | 11 | 1 | 22 | 1 | | | | | 3 | | | | | | | 0 | 0 |
| 10 | 18 | 61 | | | | | | | | | | 1060 | 0 | 2 | | | | | | | | | | | 4 | 50 | 1 | | | | | 0 | 0 |
| 11 | 1 | 61 | 47 | 34 | 56 | 14 | 19 | 9 | 26 | 9 | 34 | 0 | 0 | 0 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 11 | 15 | 61 | 47 | 40 | 56 | 34 | 58 | 7 | 19 | 2 | 17 | 0 | 10 | 63 | 11 | 4 | | | | | | | | | 51 | 51 | 4 | 50 | 2 | 76 | 2 | 0 | 0 |
| 12 | 6 | 61 | 82 | 31 | 26 | 9 | 71 | 6 | 70 | 6 | 48 | 0 | 0 | 13 | 21 | 1 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 12 | 27 | 61 | 92 | 17 | 45 | 12 | 70 | 9 | 64 | 8 | 54 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 3 | 62 | 2 | 18 | 92 | 12 | 82 | 12 | 26 | 11 | 47 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 70 | 15 | 92 | 13 | 82 | 8 | 64 | 7 | 57 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 7 | 62 | 92 | 31 | 64 | 8 | 26 | 6 | 47 | 5 | 50 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 28 | 62 | 92 | 29 | 36 | 13 | 51 | 5 | 64 | 5 | 48 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 3 | 7 | 62 | 92 | 5 | 64 | 7 | 43 | 6 | 50 | 5 | 67 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 3 | 21 | 62 | 92 | 31 | 36 | 12 | 51 | 9 | 45 | 5 | 43 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 4 | 4 | 62 | 92 | 33 | 62 | 14 | 36 | 13 | 45 | 4 | 36 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 3 | 0 |
| 4 | 18 | 62 | 92 | 17 | 36 | 9 | 52 | 6 | 2 | 6 | 62 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 2 | 62 | 92 | 40 | 27 | 12 | 9 | 10 | 82 | 9 | 29 | 0 | 10 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 15 | 62 | 27 | 39 | 9 | 19 | 67 | 13 | 92 | 7 | 22 | 0 | 0 | 7 | 21 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 23 | 62 | 27 | 30 | 9 | 33 | 91 | 9 | 92 | 6 | 22 | 0 | 0 | 250 | 11 | 6 | 2 | 2 | 17 | 1 | | | | | 5 | 76 | 1 | | | | | 0 | 0 |
| 6 | 6 | 62 | 9 | 28 | 27 | 15 | 82 | 7 | 26 | 6 | 44 | 0 | 0 | 552 | 11 | 7 | 17 | 5 | 46 | 2 | | | | | 220 | 50 | 5 | 51 | 5 | 76 | 5 | 0 | 0 |
| 6 | 20 | 62 | 92 | 17 | 28 | 11 | 80 | 9 | 26 | 7 | 56 | 0 | 10 | 126 | 46 | 4 | 11 | 4 | 17 | 1 | | | | | 84 | 51 | 4 | 50 | 4 | 76 | 3 | 0 | 0 |
| 7 | 11 | 62 | 27 | 15 | 26 | 15 | 82 | 8 | 58 | 5 | 57 | 0 | 0 | 22 | 17 | 2 | | | | | | | | | 6 | 50 | 1 | | | | | 0 | 0 |
| 7 | 18 | 62 | 47 | 14 | 82 | 12 | 26 | 9 | 58 | 8 | 57 | 0 | 0 | 43 | 17 | 3 | 11 | 2 | 15 | 1 | | | | | 51 | 50 | 4 | 76 | 2 | 52 | 2 | 0 | 8 |
| 8 | 1 | 62 | 27 | 23 | 47 | 19 | 26 | 9 | 18 | 8 | 41 | 0 | 0 | 90 | 11 | 5 | | | | | | | | | 10 | 50 | 2 | | | | | 0 | 0 |
| 8 | 15 | 62 | 47 | 53 | 18 | 25 | 56 | 5 | 2 | 2 | 15 | 0 | 0 | 80 | 17 | 3 | 46 | 3 | 22 | 3 | 11 | 1 | | | 15 | 77 | 2 | 50 | 2 | | | 0 | 0 |
| 9 | 5 | 62 | 18 | 53 | 47 | 9 | 92 | 4 | 2 | 4 | 30 | 0 | 0 | 162 | 17 | 4 | 11 | 4 | 22 | 3 | 15 | 2 | | | 38 | 51 | 3 | 50 | 2 | 76 | 2 | 0 | 0 |
| 9 | 19 | 62 | 19 | 48 | 92 | 6 | 26 | 6 | 9 | 4 | 36 | 10 | 0 | 138 | 17 | 4 | 22 | 4 | 5 | 2 | 46 | 1 | 11 | 1 | 21 | 50 | 3 | 51 | 1 | 77 | 1 | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** MARYLAND
**MAJOR BASIN** NORTH ATLANTIC
**MINOR BASIN** SUSQUEHANNA-JUNIATA
**STATION LOCATION** SUSQUEHANNA RIVER AT
CONOWINGO, MARYLAND

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 11 | 15 | 61 | 11 | 22 | 5100 | 203 | 63 | 140 | 3 | 13 | 22 | 2 | 1 | 18 | 1 | 7 | 4 | 1 | 13 |
| 12 | 27 | 61 | 1 | 3 | 4940 | 138 | 58 | 80 | 1 | 13 | 24 | 3 | 2 | 18 | 1 | 7 | 4 | 1 | 8 |
| 1 | 31 | 62 | 2 | 7 | 4879 | 166 | 61 | 105 | 4 | 15 | 20 | 2 | 2 | 14 | 2 | 7 | 4 | 1 | 10 |
| 3 | 6 | 62 | 3 | 14 | 5585 | 134 | 57 | 77 | 1 | 13 | 21 | 3 | 2 | 15 | 1 | 6 | 3 | 1 | 12 |
| 4 | 11 | 62 | 4 | 18 | 5156 | 95 | 33 | 62 | 3 | 8 | 10 | 2 | 1 | 6 | 1 | 3 | 2 | 1 | 6 |
| 5 | 3 | 62 | 5 | 15 | 5133 | 139 | 65 | 74 | 2 | 20 | 18 | 2 | 2 | 13 | 1 | 8 | 6 | 1 | 10 |
| 6 | 20 | 62 | 6 | 29 | 5442 | 226 | 128 | 98 | 6 | 37 | 35 | 3 | 3 | 28 | 1 | 14 | 15 | 3 | 18 |
| 8 | 1 | 62 | 8 | 10 | 5669 | 216 | 107 | 109 | 3 | 28 | 27 | 2 | 2 | 22 | 1 | 11 | 16 | 1 | 21 |
| 8 | 30 | 62 | 9 | 7 | 4914 | 269 | 95 | 174 | 3 | 22 | 26 | 1 | 1 | 23 | 1 | 10 | 10 | 2 | 22 |

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 4 | 61 | 22.2 | 6.2 | 7.2 | 1.5 | - | - | - | - | 11 | 43 | 120 | 8 | 38 | - | - | - | 200 |
| 10 | 11 | 61 | 19.4 | 5.5 | 7.3 | 1.0 | - | - | - | - | 12 | 41 | 130 | 6 | 5 | - | - | - | 20 |
| 10 | 18 | 61 | 17.8 | 6.7 | - | .7 | - | - | - | - | 12 | - | - | 6 | 4 | - | - | - | 340 |
| 10 | 25 | 61 | 17.8 | 7.3 | 7.1 | .9 | - | - | - | - | 11 | 45 | 146 | 6 | 10 | - | - | - | 8 |
| 11 | 1 | 61 | 15.6 | 7.8 | 7.3 | - | - | - | - | - | 11 | 46 | 155 | 4 | 3 | - | - | - | 6 |
| 11 | 8 | 61 | 16.7 | 8.8 | 7.1 | 1.3 | - | - | - | - | 12 | 46 | 159 | 4 | 6 | - | - | - | 10 |
| 11 | 15 | 61 | 12.8 | 8.6 | 7.3 | .8 | - | - | - | - | 16 | 47 | 181 | 6 | 4 | - | - | - | 200 |
| 11 | 22 | 61 | 12.2 | 9.4 | 7.3 | - | - | - | - | - | 16 | 45 | 185 | 4 | 4 | - | - | - | *2 |
| 11 | 29 | 61 | 7.8 | 11.4 | 7.3 | 1.4 | - | - | - | - | 15 | 49 | 180 | 7 | 8 | - | - | - | 97 |
| 12 | 6 | 61 | 7.8 | 12.0 | 7.1 | 1.8 | - | - | - | - | 15 | 36 | 143 | 6 | 5 | - | - | - | 12 |
| 12 | 13 | 61 | 6.7 | 12.6 | 7.1 | 1.8 | - | - | - | - | 11 | 34 | 108 | 6 | 4 | - | - | - | - |
| 12 | 20 | 61 | 4.4 | 12.9 | 7.1 | 1.7 | - | - | - | - | 11 | 33 | 103 | 7 | 8 | 59 | - | 168 | 43 |
| 12 | 27 | 61 | 2.2 | 12.8 | 7.3 | 1.0 | - | - | - | - | 10 | 42 | 109 | 7 | 5 | - | - | - | - |
| 12 | 29 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 360 |
| 1 | 3 | 62 | 3.3 | 13.5 | 7.1 | .8 | 3 | - | - | - | 11 | 34 | 96 | 6 | 6 | - | - | - | 380 |
| 1 | 12 | 62 | 3.3 | 14.4 | 7.0 | 1.1 | 7 | - | - | .3 | 9 | 27 | 72 | 11 | 63 | 45 | .1 | 122 | 3800 |
| 1 | 17 | 62 | 2.2 | 13.8 | 7.1 | 1.4 | 8 | 1.0 | 3.9 | .3 | 9 | 27 | 67 | 8 | 20 | 41 | .1 | 121 | 4200 |
| 1 | 24 | 62 | 1.7 | 13.6 | 6.9 | .6 | 7 | .5 | 3.6 | .3 | 8 | 22 | 79 | 7 | 13 | - | .0 | 138 | 340 |
| 1 | 31 | 62 | 1.7 | - | 6.9 | 1.0 | 1 | .7 | 3.5 | .1 | 9 | 25 | 84 | 4 | 3 | 58 | .1 | 134 | 54 |
| 2 | 7 | 62 | 1.7 | 13.1 | 7.1 | - | 4 | .8 | 4.4 | .1 | 9 | 25 | 81 | 4 | 4 | 55 | .0 | 132 | 35 |
| 2 | 20 | 62 | 2.8 | 12.6 | 6.9 | .7 | 4 | .8 | 4.4 | .2 | 10 | 23 | 100 | 5 | 7 | 76 | .2 | 154 | 100 |
| 2 | 28 | 62 | 3.9 | 13.6 | 6.9 | 3.3 | 15 | 1.4 | 4.9 | .1 | 11 | 29 | 78 | 12 | 142 | 48 | .1 | 134 | 6000 |
| 3 | 8 | 62 | 1.7 | 13.8 | 6.9 | 1.8 | 6 | 1.0 | 4.5 | .1 | 8 | 20 | 58 | 10 | 10 | 35 | .1 | 100 | - |
| 3 | 14 | 62 | 2.8 | 13.0 | 7.1 | 1.6 | 8 | 2.7 | 4.6 | .1 | 7 | 27 | 75 | 6 | 135 | 49 | .1 | 132 | 1000 |
| 3 | 21 | 62 | 5.6 | 12.5 | 7.1 | - | 13 | 2.6 | 4.5 | .0 | 6 | 24 | 56 | 14 | 40 | 32 | .1 | 96 | - |
| 3 | 28 | 62 | 7.8 | 12.2 | 7.0 | 1.3 | 8 | 1.9 | 3.6 | .1 | 5 | 19 | 50 | 8 | 120 | 31 | .1 | 85 | 850 |
| 4 | 4 | 62 | 8.9 | 13.0 | 6.9 | 1.0 | 21 | 2.6 | 4.9 | .1 | 3 | 17 | 36 | 12 | 150 | - | - | 75 | 600 |
| 4 | 11 | 62 | 10.0 | 12.2 | 6.9 | .8 | - | 1.9 | 3.9 | - | 6 | 19 | 40 | 8 | 35 | 27 | - | 74 | 190 |
| 4 | 18 | 62 | 8.3 | 12.4 | 7.1 | .7 | 1 | .9 | 2.2 | .2 | 7 | 22 | 55 | 5 | 18 | 35 | .0 | 93 | 510 |
| 4 | 25 | 62 | 13.3 | 10.5 | 7.2 | - | 5 | .8 | 2.9 | .1 | 7 | 23 | 68 | 4 | 25 | 47 | .0 | 110 | 180 |
| 5 | 2 | 62 | 13.3 | 8.9 | 7.0 | 1.2 | 6 | - | - | .1 | 7 | 29 | 114 | 4 | 28 | 48 | .1 | 114 | 160 |
| 5 | 9 | 62 | 17.8 | 9.8 | 7.1 | 1.5 | 2 | 1.1 | 2.4 | .1 | 7 | 33 | 79 | 4 | 12 | 44 | .0 | 125 | 48 |
| 5 | 16 | 62 | 16.7 | 8.9 | 7.4 | 1.0 | 8 | .7 | 2.1 | .1 | 7 | 33 | 83 | 7 | 10 | 54 | .2 | 132 | 60 |
| 5 | 23 | 62 | 20.6 | 6.8 | 7.1 | .7 | 2 | 1.4 | 2.8 | .1 | 7 | 36 | 86 | 7 | 6 | 57 | .0 | 139 | 290 |
| 5 | 29 | 62 | 23.3 | 5.3 | 7.1 | 1.8 | 2 | 1.6 | 2.8 | .1 | 8 | 37 | 97 | 4 | 7 | 66 | .0 | 161 | 510 |
| 6 | 6 | 62 | 23.9 | 5.9 | 7.1 | 1.3 | - | - | - | .1 | 9 | 42 | 111 | 5 | 8 | - | .0 | 178 | 14 |
| 6 | 13 | 62 | 24.4 | 4.2 | 7.0 | 1.4 | - | - | - | - | 10 | 42 | 118 | 6 | 7 | - | - | - | 1500 |
| 6 | 20 | 62 | 24.4 | 4.4 | 7.0 | - | - | - | - | - | - | 42 | 123 | - | 5 | - | - | - | 20 |
| 6 | 27 | 62 | 25.6 | 4.9 | 6.9 | - | - | - | - | - | 9 | 27 | 157 | 6 | 4 | - | - | - | - |

**MINOR BASIN** SUSQUEHANNA-JUNIATA

**STATION LOCATION** SUSQUEHANNA RIVER AT
CONOWINGO, MARYLAND

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 11 | 62 | 24.4 | 4.3 | 7.1 | 1.9 | 6 | - | - | .5 | 10 | 43 | 142 | 6 | 4 | 97 | .0 | 218 | 61 |
| 7 | 18 | 62 | 26.1 | 3.5 | 7.0 | - | 6 | - | - | .0 | 11 | 46 | 141 | 6 | 7 | 85 | .0 | 243 | 250 |
| 7 | 25 | 62 | 25.0 | 3.6 | 7.0 | - | 6 | - | - | .0 | 12 | 43 | 144 | 6 | 5 | 102 | .0 | 237 | 8 |
| 8 | 1 | 62 | 25.6 | 3.8 | 7.0 | - | - | - | - | - | - | 44 | - | 6 | 6 | - | - | - | 12 |
| 8 | 8 | 62 | 24.4 | 4.0 | 7.0 | 1.6 | 6 | - | - | .0 | 14 | 43 | 159 | 6 | 4 | 105 | .0 | 272 | - |
| 8 | 15 | 62 | 24.4 | 4.5 | 7.2 | 2.5 | 4 | .7 | 3.9 | - | 13 | 41 | 176 | 4 | 3 | 127 | .0 | 315 | 24 |
| 8 | 22 | 62 | 25.6 | 5.4 | 7.0 | 1.0 | 6 | - | - | - | 20 | 42 | 189 | 4 | 3 | 147 | - | 328 | *2 |
| 8 | 29 | 62 | 24.4 | - | 7.2 | 1.4 | 11 | - | - | .0 | 14 | 45 | 194 | 4 | 3 | 156 | - | 319 | 22 |
| 9 | 5 | 62 | 24.4 | 4.3 | 7.3 | 1.5 | 8 | - | - | - | 17 | 38 | 200 | 4 | 3 | 144 | .0 | 349 | 10 |
| 9 | 12 | 62 | 24.4 | 4.5 | 7.3 | 1.2 | 5 | - | - | - | 17 | 40 | 210 | 4 | 2 | 181 | .0 | 333 | - |
| 9 | 19 | 62 | 23.9 | 5.0 | 7.1 | 1.5 | 8 | - | - | - | 17 | 40 | 211 | 4 | 2 | 169 | .0 | 366 | 220 |
| 9 | 26 | 62 | 20.6 | 6.1 | 7.3 | 1.6 | 8 | - | - | - | 17 | 40 | 197 | 6 | 2 | 144 | .0 | 322 | 160 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Marietta, Pennsylvania
Operated by U.S. Geological Survey

MAJOR BASIN North Atlantic

MINOR BASIN Susquehanna-Juniata

STATION LOCATION Susquehanna River at
Conowingo, Maryland

| | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.200 | 3.780 | 18.700 | 11.500 | 28.000 | 135.000 | 123.000 | 34.000 | 11.400 | 5.430 | 3.220 | 5.470 |
| 2 | 4.600 | 3.600 | 16.000 | 11.000 | 25.000 | 115.000 | 234.000 | 35.100 | 11.200 | 5.150 | 3.200 | 4.780 |
| 3 | 4.420 | 3.660 | 14.400 | 10.500 | 21.000 | 95.700 | 247.000 | 42.200 | 10.900 | 4.960 | 2.830 | 5.350 |
| 4 | 4.520 | 3.840 | 13.100 | 10.000 | 20.000 | 71.200 | 195.000 | 48.700 | 10.100 | 5.040 | 3.060 | 4.840 |
| 5 | 4.200 | 4.060 | 12.300 | 11.500 | 19.500 | 55.800 | 150.000 | 47.400 | 10.100 | 4.840 | 3.390 | 4.200 |
| 6 | 4.260 | 4.840 | 11.200 | 13.000 | 22.000 | 47.400 | 118.000 | 43.500 | 10.100 | 4.480 | 3.030 | 4.270 |
| 7 | 4.450 | 5.540 | 11.200 | 28.000 | 21.000 | 39.800 | 97.600 | 39.800 | 10.100 | 4.530 | 3.030 | 4.200 |
| 8 | 4.730 | 5.720 | 10.900 | 61.100 | 18.000 | 35.100 | 135.000 | 36.200 | 9.360 | 4.150 | 3.360 | 4.670 |
| 9 | 4.680 | 5.530 | 9.860 | 79.500 | 19.000 | 31.900 | 195.000 | 34.000 | 8.860 | 4.170 | 4.060 | 4.510 |
| 10 | 4.820 | 4.990 | 10.100 | 66.000 | 19.000 | 29.900 | 192.000 | 30.900 | 8.380 | 3.620 | 5.720 | 4.200 |
| 11 | 4.760 | 5.160 | 10.900 | 46.000 | 18.000 | 29.000 | 155.000 | 29.000 | 7.900 | 3.510 | 5.350 | 3.760 |
| 12 | 4.550 | 5.160 | 11.700 | 40.000 | 17.000 | 42.300 | 128.000 | 27.100 | 7.670 | 3.350 | 4.830 | 3.690 |
| 13 | 4.410 | 4.940 | 12.300 | 30.000 | 15.000 | 87.700 | 126.000 | 26.300 | 9.360 | 3.310 | 5.350 | 3.600 |
| 14 | 4.040 | 5.180 | 12.000 | 21.000 | 15.000 | 97.600 | 130.000 | 24.600 | 10.100 | 3.330 | 5.170 | 4.030 |
| 15 | 4.680 | 6.070 | 10.500 | 22.000 | 13.500 | 109.000 | 130.000 | 23.100 | 11.700 | 3.200 | 4.510 | 3.940 |
| 16 | 4.380 | 6.240 | 9.360 | 25.000 | 12.500 | 111.000 | 124.000 | 21.600 | 10.400 | 3.730 | 4.200 | 3.440 |
| 17 | 4.080 | 8.380 | 10.100 | 33.000 | 13.500 | 93.800 | 109.000 | 19.500 | 10.600 | 3.440 | 4.510 | 3.470 |
| 18 | 3.970 | 8.620 | 11.400 | 36.000 | 13.500 | 74.500 | 93.800 | 18.000 | 11.400 | 3.640 | 4.830 | 3.520 |
| 19 | 4.080 | 9.440 | 17.000 | 33.000 | 15.000 | 63.300 | 81.300 | 17.300 | 10.600 | 3.890 | 4.830 | 3.300 |
| 20 | 3.950 | 11.200 | 20.100 | 32.000 | 15.000 | 60.300 | 74.500 | 17.000 | 9.610 | 3.840 | 4.510 | 3.470 |
| 21 | 4.050 | 11.400 | 21.600 | 29.000 | 14.000 | 64.900 | 71.200 | 16.000 | 9.610 | 3.770 | 4.200 | 3.280 |
| 22 | 4.370 | 10.900 | 22.000 | 25.000 | 15.000 | 92.000 | 68.000 | 15.600 | 8.380 | 4.380 | 4.200 | 3.440 |
| 23 | 3.970 | 10.100 | 23.000 | 24.000 | 14.500 | 130.000 | 63.300 | 16.000 | 7.670 | 4.160 | 4.050 | 3.280 |
| 24 | 3.870 | 10.900 | 23.000 | 22.000 | 26.000 | 148.000 | 58.800 | 16.000 | 8.050 | 4.150 | 3.610 | 3.200 |
| 25 | 4.360 | 12.300 | 22.000 | 24.000 | 54.000 | 139.000 | 52.900 | 16.000 | 7.440 | 3.900 | 3.760 | 3.170 |
| 26 | 3.330 | 12.800 | 18.000 | 27.000 | 67.000 | 126.000 | 50.100 | 13.700 | 7.670 | 3.900 | 3.580 | 3.030 |
| 27 | 3.760 | 20.600 | 19.000 | 29.000 | 75.000 | 109.000 | 47.400 | 13.400 | 7.440 | 3.840 | 3.440 | 3.110 |
| 28 | 3.530 | 23.900 | 18.000 | 33.000 | 110.000 | 99.500 | 43.500 | 13.400 | 7.210 | 3.530 | 3.550 | 3.520 |
| 29 | 3.670 | 21.600 | 16.000 | 34.000 | | 95.700 | 38.600 | 12.800 | 6.520 | 3.590 | 10.800 | 5.500 |
| 30 | 3.900 | 20.100 | 12.000 | 36.000 | | 93.800 | 36.200 | 12.300 | 5.620 | 3.560 | 9.110 | 7.210 |
| 31 | 3.870 | | 10.500 | 35.000 | | 97.600 | | 11.200 | | 3.220 | 7.210 | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** PENNSYLVANIA

**MAJOR BASIN** NORTH ATLANTIC

**MINOR BASIN** SUSQUEHANNA RIVER-NORTH BRANCH

**STATION LOCATION** SUSQUEHANNA RIVER AT
SAYRE, PENNSYLVANIA

76

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 2 | 61 | 10 | 20 | - | - | - | - | - | - | 1 | 5 | 9 | 7 | 10 | 9 | | | | | | |
| 10 | 9 | 61 | 10 | 23 | - | - | - | - | - | - | 0 | 10 | 0 | 13 | 0 | 17 | | | | | | |
| 10 | 16 | 61 | 11 | 1 | - | - | - | - | - | - | 6 | 5 | 17 | 7 | 23 | 9 | | | | | | |
| 10 | 23 | 61 | 11 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 15 | 4 | 11 | 6 | 26 | 7 | | | | | | |
| 10 | 30 | 61 | 11 | 10 | - | - | - | - | - | - | 6 | 5 | 19 | 7 | 25 | 9 | | | | | | |
| 11 | 6 | 61 | 11 | 22 | - | - | - | - | - | - | 6 | 5 | 27 | 7 | 33 | 9 | | | | | | |
| 11 | 13 | 61 | 11 | 27 | - | - | - | - | - | - | 6 | 5 | 30 | 7 | 36 | 9 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | - | - | - | - | - | - | 4 | 6 | 29 | 7 | 33 | 9 | | | | | | |
| 11 | 28 | 61 | 12 | 6 | 0 | 0 | 0 | 1 | 0 | 1 | 25 | 4 | 30 | 5 | 55 | 6 | | | | | | |
| 12 | 4 | 61 | 12 | 14 | - | - | - | - | - | - | 4 | 4 | 6 | 4 | 10 | 6 | | | | | | |
| 12 | 11 | 61 | 12 | 27 | - | - | - | - | - | - | 4 | 5 | 15 | 6 | 19 | 8 | | | | | | |
| 12 | 18 | 61 | 12 | 29 | - | - | - | - | - | - | 16 | 5 | 36 | 6 | 52 | 8 | | | | | | |
| 12 | 26 | 61 | 1 | 4 | 0 | 0 | 0 | 1 | 0 | 1 | 17 | 4 | 19 | 5 | 36 | 6 | | | | | | |
| 1 | 15 | 62 | 1 | 30 | - | - | - | - | - | - | 10 | 6 | 16 | 6 | 26 | 9 | | | | | | |
| 1 | 22 | 62 | 2 | 7 | 0 | 1 | 0 | 1 | 0 | 1 | 18 | 5 | 17 | 5 | 35 | 7 | | | | | | |
| 1 | 29 | 62 | 2 | 12 | - | - | - | - | - | - | 27 | 11 | 46 | 12 | 73 | 23 | | | | | | |
| 2 | 5 | 62 | 2 | 20 | - | - | - | - | - | - | 7 | 5 | 17 | 6 | 24 | 8 | | | | | | |
| 2 | 12 | 62 | 2 | 27 | - | - | - | - | - | - | 15 | 6 | 38 | 7 | 53 | 9 | | | | | | |
| 2 | 19 | 62 | 3 | 2 | - | - | - | - | - | - | 0 | 5 | 13 | 6 | 13 | 8 | | | | | | |
| 2 | 26 | 62 | 3 | 13 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 4 | 12 | 5 | 12 | 6 | | | | | | |
| 3 | 5 | 62 | 3 | 19 | - | - | - | - | - | - | 26 | 5 | 67 | 6 | 93 | 7 | | | | | | |
| 3 | 12 | 62 | 3 | 23 | - | - | - | - | - | - | 34 | 7 | 32 | 6 | 66 | 9 | | | | | | |
| 3 | 15 | 62 | 3 | 30 | - | - | - | - | - | - | 22 | 6 | 22 | 6 | 44 | 8 | | | | | | |
| 3 | 26 | 62 | 4 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 31 | 4 | 43 | 4 | 74 | 5 | | | | | | |
| 4 | 2 | 62 | 4 | 19 | - | - | - | - | - | - | 80 | 11 | 53 | 6 | 133 | 13 | | | | | | |
| 4 | 9 | 62 | 4 | 30 | - | - | - | - | - | - | 30 | 7 | 15 | 6 | 45 | 9 | | | | | | |
| 4 | 16 | 62 | 5 | 1 | - | - | - | - | - | - | 1 | 5 | 7 | 6 | 8 | 7 | | | | | | |
| 4 | 23 | 62 | 5 | 23 | - | - | - | - | - | - | 5 | 6 | 17 | 8 | 22 | 10 | | | | | | |
| 4 | 30 | 62 | 6 | 4 | - | - | - | - | - | - | 26 | 8 | 16 | 8 | 42 | 11 | | | | | | |
| 5 | 7 | 62 | 6 | 21 | - | - | - | - | - | - | 5 | 7 | 2 | 8 | 7 | 11 | | | | | | |
| 5 | 14 | 62 | 6 | 26 | - | - | - | - | - | - | 6 | 7 | 6 | 7 | 12 | 10 | | | | | | |
| 5 | 21 | 62 | 6 | 27 | - | - | - | - | - | - | 2 | 6 | 5 | 7 | 7 | 9 | | | | | | |
| 5 | 28 | 62 | 6 | 29 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 3 | 12 | 4 | 15 | 5 | | | | | | |
| 6 | 4 | 62 | 7 | 6 | - | - | - | - | - | - | 3 | 7 | 12 | 8 | 15 | 11 | | | | | | |
| 6 | 11 | 62 | 7 | 11 | - | - | - | - | - | - | 7 | 6 | 11 | 7 | 18 | 9 | | | | | | |
| 6 | 18 | 62 | 7 | 16 | - | - | - | - | - | - | 0 | 5 | 13 | 8 | 13 | 9 | | | | | | |
| 6 | 25 | 62 | 7 | 23 | - | - | - | - | - | - | 7 | 6 | 11 | 7 | 18 | 9 | | | | | | |
| 7 | 2 | 62 | 8 | 6 | - | - | - | - | - | - | 2 | 4 | 8 | 5 | 10 | 6 | | | | | | |
| 7 | 9 | 62 | 8 | 13 | - | - | - | - | - | - | 6 | 4 | 12 | 5 | 18 | 6 | | | | | | |
| 7 | 16 | 62 | 8 | 7 | - | - | - | - | - | - | 3 | 5 | 18 | 7 | 21 | 9 | | | | | | |

SAYRE, PENNSYLVANIA 76

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 7 | 23 | 62 | 8 | 20 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 2 | 16 | 3 | 23 | 4 | | | | | | |
| 7 | 30 | 62 | 8 | 22 | - | - | - | - | - | - | 3 | 5 | 8 | 7 | 11 | 9 | | | | | | |
| 8 | 6 | 62 | 8 | 29 | - | - | - | - | - | - | 3 | 5 | 19 | 7 | 22 | 9 | | | | | | |
| 8 | 20 | 62 | 9 | 6 | - | - | - | - | - | - | 8 | 5 | 14 | 7 | 22 | 9 | | | | | | |
| 8 | 27 | 62 | 9 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 15 | 8 | 18 | 10 | | | | | | |
| 9 | 4 | 62 | 10 | 2 | - | - | - | - | - | - | 4 | 5 | 6 | 8 | 10 | 9 | | | | | | |
| 9 | 10 | 62 | 10 | 9 | - | - | - | - | - | - | 8 | 5 | 4 | 7 | 12 | 9 | | | | | | |
| 9 | 17 | 62 | 10 | 14 | - | - | - | - | - | - | 2 | 5 | 13 | 7 | 15 | 8 | | | | | | |
| 9 | 24 | 62 | 10 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 17 | 7 | 19 | 8 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** PENNSYLVANIA
**MAJOR BASIN** NORTH ATLANTIC
**MINOR BASIN** SUSQUEHANNA RIVER-NORTH BRANCH
**STATION LOCATION** SUSQUEHANNA RIVER AT
SAYRE, PENNSYLVANIA 76

| DATE OF SAMPLE | | | TOTAL | ALGAE (*Number per milliliter*) BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 17700 | 40 | 0 | 3650 | 0 | 2320 | 20 | 11180 | 480 | 1590 | 410 | 71 | 6 | 68 | 5 | 69 | 3 | 51 | 4 | 31 | 4 | 38 | 2 | 34 | 2 | 40 | 1 | 55 | 1 | 30 | 1 |
| 10 | 16 | 61 | 4700 | 40 | 0 | 850 | 0 | 2480 | 20 | 990 | 290 | 290 | 150 | 51 | 5 | 71 | 3 | 68 | 2 | 38 | 1 | 31 | 1 | | | | | | | | | | |
| 11 | 6 | 61 | 4600 | 0 | 40 | 420 | 0 | 390 | 0 | 3420 | 330 | 580 | 310 | 71 | 5 | 68 | 3 | 51 | 2 | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 3300 | 140 | 0 | 250 | 0 | 290 | 20 | 2090 | 500 | 680 | 410 | 68 | 4 | 71 | 3 | 57 | 1 | 51 | 1 | | | | | | | | | | | | |
| 12 | 4 | 61 | 500 | 0 | 0 | 20 | 20 | 20 | 0 | 100 | 370 | 0 | 150 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 400 | 0 | 0 | 0 | 0 | 20 | 20 | 80 | 230 | 60 | 100 | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 150 | 20 | 60 | | | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 1100 | 50 | 0 | 0 | 0 | 0 | 20 | 110 | 880 | 50 | 290 | 82 | 1 | 92 | 1 | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 50 | 20 | 90 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 700 | 0 | 0 | 20 | 0 | 40 | 0 | 560 | 120 | 40 | 0 | 71 | 2 | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 500 | 0 | 0 | 20 | 0 | 20 | 20 | 110 | 360 | 50 | 110 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 900 | 0 | 0 | 40 | 0 | 20 | 0 | 80 | 700 | 60 | 170 | 82 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 2900 | 0 | 0 | 40 | 0 | 100 | 20 | 250 | 2510 | 250 | 560 | 82 | 3 | 92 | 2 | 87 | 1 | 81 | 1 | 79 | 1 | 69 | 1 | 88 | 1 | | | | | | |
| 4 | 16 | 62 | 200 | 0 | 0 | 0 | 0 | 40 | 0 | 60 | 80 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 3100 | 0 | 0 | 80 | 0 | 250 | 20 | 750 | 1970 | 80 | 210 | 71 | 3 | 81 | 2 | 85 | 2 | 77 | 1 | 92 | 1 | 87 | 1 | 57 | 1 | 82 | 1 | 79 | 1 | | |
| 5 | 21 | 62 | 20800 | 0 | 210 | 1840 | 20 | 230 | 250 | 10760 | 7470 | 3550 | 1480 | 68 | 6 | 88 | 4 | 71 | 4 | 81 | 4 | 85 | 3 | 92 | 3 | 82 | 2 | 32 | 2 | 38 | 2 | 87 | 2 |
| 6 | 4 | 62 | 94700 | 80 | 6880 | 51530 | 380 | 1940 | 40 | 25490 | 8310 | 17600 | 5060 | 24 | 8 | 71 | 8 | 17 | 6 | 40 | 6 | 68 | 6 | 81 | 4 | 38 | 4 | 30 | 4 | 34 | 4 | 85 | 4 |
| 6 | 18 | 62 | 110000 | 6620 | 0 | 47070 | 0 | 12630 | 830 | 40370 | 2490 | 15940 | 210 | 68 | 9 | 24 | 8 | 51 | 7 | 25 | 6 | 34 | 6 | 2 | 5 | 38 | 5 | 31 | 5 | 40 | 5 | 3 | 4 |
| 7 | 2 | 62 | 40000 | 1570 | 0 | 30660 | 0 | 2260 | 580 | 3520 | 1410 | 1570 | 80 | 38 | 7 | 25 | 5 | 51 | 4 | 40 | 4 | 68 | 4 | 3 | 3 | 71 | 3 | 26 | 3 | 44 | 3 | | |
| 7 | 16 | 62 | 77400 | 1900 | 840 | 38870 | 0 | 5740 | 40 | 17430 | 12530 | 4090 | 3880 | 38 | 7 | 40 | 7 | 68 | 7 | 51 | 6 | 71 | 6 | 88 | 6 | 3 | 3 | 25 | 3 | 26 | 3 | 29 | 3 |
| 8 | 6 | 62 | 18500 | 210 | 0 | 6050 | 0 | 3440 | 2190 | 1350 | 5300 | 1240 | 1860 | 51 | 5 | 38 | 5 | 88 | 5 | 60 | 4 | 68 | 4 | 25 | 4 | 40 | 3 | 87 | 3 | 79 | 3 | 3 | 1 |
| 8 | 20 | 62 | 121800 | 4350 | 970 | 69880 | 0 | 7510 | 0 | 35740 | 3380 | 7890 | 1730 | 24 | 9 | 68 | 8 | 71 | 7 | 40 | 7 | 51 | 6 | 38 | 6 | 3 | 5 | 26 | 5 | 30 | 4 | 87 | 4 |
| 9 | 4 | 62 | 5100 | 590 | 0 | 3470 | 0 | 110 | 0 | 380 | 560 | 250 | 200 | 38 | 4 | 3 | 2 | 26 | 2 | 68 | 2 | 87 | 1 | 25 | 1 | 45 | 1 | 88 | 1 | 44 | 1 | | |
| 9 | 17 | 62 | 9100 | 990 | 0 | 6010 | 0 | 740 | 0 | 740 | 560 | 270 | 630 | 24 | 4 | 38 | 4 | 26 | 3 | 51 | 3 | 3 | 3 | 68 | 3 | 87 | 1 | 5 | 1 | 41 | 1 | 79 | 1 |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** PENNSYLVANIA
**MAJOR BASIN** NORTH ATLANTIC
**MINOR BASIN** SUSQUEHANNA RIVER-NORTH BRANCH
**STATION LOCATION** SUSQUEHANNA RIVER AT
SAYRE, PENNSYLVANIA 076

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | PROTOZOA *(Identifiable)* *Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable)* *Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 82 | 49 | 26 | 21 | 23 | 12 | 27 | 9 | 9 | 0 | 0 | 166 | 20 | 5 | 2 | 3 | 6 | 1 | 22 | 1 | | | 1 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 82 | 43 | 26 | 20 | 64 | 6 | 70 | 6 | 25 | 0 | 0 | 0 | | | | | | | | | | | 5 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 82 | 54 | 26 | 15 | 16 | 6 | 64 | 5 | 20 | 0 | 0 | 7 | | | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 11 | 20 | 61 | 26 | 36 | 82 | 19 | 64 | 8 | 70 | 7 | 30 | 0 | 0 | 15 | 15 | 2 | | | | | | | | | 0 | | | | | | | 6 | 0 |
| 12 | 4 | 61 | 64 | 14 | 16 | 9 | 36 | 8 | 82 | 7 | 62 | 20 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 36 | 23 | 64 | 10 | 92 | 8 | 82 | 6 | 53 | 0 | 10 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 36 | 15 | 51 | 11 | 82 | 9 | 64 | 9 | 56 | 0 | 10 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 36 | 23 | 92 | 14 | 64 | 7 | 51 | 6 | 50 | 110 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 2 | 1 |
| 2 | 5 | 62 | 36 | 21 | 92 | 17 | 16 | 11 | 31 | 9 | 42 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 82 | 20 | 51 | 14 | 36 | 8 | 92 | 7 | 51 | 80 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 51 | 21 | 92 | 13 | 36 | 13 | 45 | 7 | 46 | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 36 | 27 | 51 | 15 | 92 | 11 | 63 | 7 | 40 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 36 | 22 | 92 | 12 | 62 | 10 | 16 | 6 | 50 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 16 | 62 | 64 | 13 | 36 | 10 | 65 | 9 | 92 | 8 | 60 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 82 | 31 | 31 | 11 | 9 | 10 | 36 | 5 | 43 | 40 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 27 | 37 | 31 | 13 | 67 | 11 | 82 | 9 | 30 | 250 | 0 | 21 | 6 | 1 | | | | | | | | | 0 | | | | | | | 6 | 0 |
| 6 | 4 | 62 | 82 | 47 | 31 | 11 | 27 | 8 | 51 | 6 | 28 | 0 | 0 | 198 | 11 | 6 | | | | | | | | | 0 | | | | | | | 0 | 2 |
| 6 | 18 | 62 | 27 | 86 | 82 | 3 | 16 | 2 | 31 | 2 | 7 | 0 | 10 | 31 | 20 | 2 | 46 | 1 | | | | | | | 0 | | | | | | | 1 | 0 |
| 7 | 2 | 62 | 26 | 33 | 82 | 22 | 16 | 12 | 27 | 5 | 28 | 0 | 0 | 13 | 15 | 1 | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 7 | 16 | 62 | 27 | 38 | 70 | 17 | 82 | 16 | 26 | 15 | 14 | 40 | 0 | 2380 | 22 | 9 | 47 | 4 | 46 | 2 | 11 | 2 | 2 | 2 | 0 | | | | | | | 1 | 0 |
| 8 | 6 | 62 | 70 | 40 | 27 | 15 | 26 | 14 | 64 | 9 | 22 | 0 | 0 | 1590 | 22 | 8 | 15 | 2 | 17 | 2 | 21 | 2 | 11 | 1 | 0 | | | | | | | 1 | 0 |
| 8 | 20 | 62 | 26 | 32 | 82 | 31 | 27 | 16 | 64 | 5 | 16 | 0 | 0 | 373 | 22 | 6 | 15 | 2 | 18 | 2 | 16 | 2 | | | 0 | | | | | | | 0 | 3 |
| 9 | 4 | 62 | 27 | 33 | 26 | 21 | 64 | 10 | 70 | 9 | 27 | 0 | 0 | 75 | 22 | 4 | 15 | 3 | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 26 | 37 | 64 | 20 | 16 | 17 | 27 | 7 | 19 | 0 | 0 | 22 | 2 | 1 | 15 | 1 | | | | | | | 1 | | | | | | | 0 | 0 |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 10 | 19 | 61 | 11 | 16 | 6386# | 207 | 82 | 125 | 2 | 14 | 37 | 5 | 3 | 26 | 3 | 10 | 7 | 2 | 10 |
| 12 | 4 | 61 | 12 | 13 | 1846# | 242 | 72 | 170 | 4 | 19 | 22 | 6 | 2 | 14 | 0 | 7 | 4 | 1 | 15 |
| 1 | 2 | 62 | 1 | 10 | 2295 | 267 | 64 | 203 | 2 | 17 | 23 | 4 | 2 | 15 | 2 | 8 | 3 | 1 | 10 |
| 2 | 5 | 62 | 2 | 13 | 2080# | 366 | 139 | 227 | 7 | 38 | 38 | 3 | 2 | 31 | 2 | 14 | 11 | 6 | 25 |
| 3 | 5 | 62 | 3 | 14 | 3478 | 246 | 97 | 149 | 1 | 18 | 35 | 7 | 5 | 21 | 2 | 15 | 5 | 2 | 21 |
| 4 | 2 | 62 | 4 | 12 | 5890 | 88 | 29 | 59 | 3 | 7 | 8 | 2 | 1 | 5 | 0 | 3 | 2 | 0 | 6 |
| 5 | 7 | 62 | 5 | 16 | 4071 | 125 | 57 | 68 | 2 | 16 | 17 | 2 | 1 | 13 | 1 | 6 | 3 | 1 | 12 |
| 6 | 4 | 62 | 6 | 12 | 3504# | 209 | 93 | 116 | 3 | 22 | 35 | 2 | 3 | 30 | 0 | 13 | 6 | 1 | 13 |
| 7 | 3 | 62 | 7 | 10 | 3414# | 277 | 163 | 114 | 5 | 34 | 70 | 3 | 6 | 55 | 6 | 18 | 8 | 3 | 25 |
| 8 | 6 | 62 | 8 | 15 | 4546 | 284 | 127 | 157 | 3 | 32 | 46 | 2 | 2 | 37 | 5 | 15 | 14 | 3 | 14 |
| 9 | 4 | 62 | 9 | 13 | 3670 | 235 | 75 | 160 | 2 | 18 | 31 | 2 | 1 | 27 | 1 | 8 | 5 | 2 | 9 |

# ESTIMATED

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** PENNSYLVANIA
**MAJOR BASIN** NORTH ATLANTIC
**MINOR BASIN** SUSQUEHANNA RIVER-NORTH BRANCH
**STATION LOCATION** SUSQUEHANNA RIVER AT
SAYRE, PENNSYLVANIA 76

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 18.5 | - | 7.8 | - | - | - | - | - | - | 98 | 118 | 5 | 10 | - | - | - | 1300 |
| 10 | 9 | 61 | 18.0 | - | 7.9 | - | - | - | - | - | - | 100 | 118 | 5 | 10 | - | - | - | 2500 |
| 10 | 16 | 61 | 14.0 | - | 8.0 | - | - | - | - | - | 18 | 104 | 120 | 5 | 10 | 27 | .4 | - | 450 |
| 10 | 19 | 61 | - | - | - | - | 24 | - | - | - | - | - | - | - | - | - | - | - | - |
| 10 | 23 | 61 | 9.5 | - | 8.4 | - | - | - | - | - | - | 115 | 126 | 5 | 10 | 29 | - | 171 | 5000 |
| 10 | 30 | 61 | 12.5 | - | 7.9 | - | - | - | - | - | - | 112 | 120 | 5 | 10 | - | - | - | *50 |
| 11 | 6 | 61 | 12.5 | - | 7.7 | - | - | - | - | - | 23 | 108 | 120 | 5 | 10 | 27 | .4 | - | 230 |
| 11 | 13 | 61 | 7.5 | - | 7.8 | - | - | - | - | - | 12 | 96 | 114 | 5 | 10 | 23 | .1 | - | *50 |
| 11 | 20 | 61 | 6.5 | - | 7.7 | - | - | - | - | - | 11 | 86 | 94 | 5 | 10 | 21 | .1 | - | *50 |
| 11 | 28 | 61 | 8.0 | - | 7.5 | - | - | - | - | - | 5 | 53 | 74 | 5 | 12 | 18 | - | - | 15000 |
| 12 | 4 | 61 | 5.0 | - | 7.6 | - | - | - | - | - | - | 53 | 72 | 5 | 12 | 19 | .2 | - | 200 |
| 12 | 11 | 61 | 5.1 | - | 7.7 | - | 10 | - | - | - | 9 | 55 | 81 | 5 | 12 | 78 | .1 | - | *50 |
| 12 | 18 | 61 | 1.2 | - | 7.5 | - | - | - | - | - | - | 67 | 90 | 5 | 10 | - | - | - | - |
| 12 | 26 | 61 | 1.2 | - | 8.2 | - | - | - | - | - | - | 47 | 72 | 5 | 12 | - | - | - | *50 |
| 1 | 2 | 62 | 1.0 | - | 7.7 | - | - | - | - | - | - | 58 | 82 | 5 | 10 | - | - | - | - |
| 1 | 8 | 62 | 1.0 | - | 7.1 | - | 30 | - | - | - | - | 28 | 48 | 10 | 190 | - | - | - | 3600 |
| 1 | 15 | 62 | 1.4 | - | 7.3 | - | - | - | - | - | 10 | 48 | 74 | 5 | 15 | 31 | - | - | 2800 |
| 1 | 22 | 62 | 1.8 | - | 7.4 | - | - | - | - | - | 6 | 52 | 70 | 5 | 15 | 18 | - | 81 | *50 |
| 1 | 29 | 62 | 1.0 | - | 7.2 | - | - | - | - | - | 7 | 42 | 66 | 5 | 10 | 16 | .2 | - | 50 |
| 2 | 5 | 62 | .6 | - | 7.3 | - | - | - | - | - | - | 65 | 92 | 5 | 10 | 18 | - | - | 100 |
| 2 | 12 | 62 | .6 | - | 7.2 | - | 15 | - | - | - | - | 58 | 82 | 10 | 10 | - | - | - | 50 |
| 2 | 19 | 62 | .5 | - | 7.3 | - | - | - | - | - | - | 80 | 108 | 5 | 10 | 45 | .1 | - | 91 |
| 2 | 26 | 62 | .6 | - | 7.4 | - | - | - | - | - | - | 80 | 106 | 5 | 10 | - | - | - | *50 |
| 3 | 5 | 62 | .8 | - | 7.3 | - | - | - | - | - | 9 | 49 | 66 | 5 | 10 | 14 | - | 72 | 460 |
| 3 | 12 | 62 | .9 | - | 7.2 | - | 24 | - | - | - | - | 49 | 68 | 5 | 35 | - | - | - | 300 |
| 3 | 19 | 62 | 2.2 | - | 7.5 | - | - | - | - | - | - | 41 | 58 | 5 | 25 | - | - | - | 250 |
| 3 | 26 | 62 | 5.0 | - | 7.4 | - | - | - | - | - | - | 30 | 46 | 10 | 35 | - | - | - | *50 |
| 4 | 2 | 62 | 2.8 | - | 7.2 | - | - | - | - | - | 4 | 18 | 32 | 5 | 180 | 13 | - | - | 1600 |
| 4 | 9 | 62 | 6.0 | - | 7.4 | - | - | - | - | - | 8 | 27 | 38 | 5 | 65 | 18 | .0 | - | 150 |
| 4 | 13 | 62 | - | - | - | - | 10 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 16 | 62 | 7.3 | - | 7.3 | - | - | - | - | - | 8 | 34 | 58 | 5 | 15 | 70 | - | 83 | 1300 |
| 4 | 23 | 62 | 10.1 | - | 7.4 | - | - | - | - | - | - | 42 | 60 | 5 | 10 | - | - | - | *50 |
| 4 | 30 | 62 | 16.4 | - | 7.5 | - | - | - | - | - | 8 | 52 | 74 | 5 | 15 | 22 | .0 | - | 200 |
| 5 | 7 | 62 | 13.2 | - | 7.3 | - | - | - | - | - | 7 | 48 | 74 | 5 | 15 | 22 | - | - | 910 |
| 5 | 14 | 62 | 13.6 | - | 7.8 | - | - | - | - | - | 5 | 57 | 90 | 5 | 10 | 7 | .0 | - | 200 |
| 5 | 17 | 62 | - | - | - | - | 13 | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 21 | 62 | 20.9 | - | 7.9 | - | - | - | - | - | 11 | 75 | 104 | 5 | 10 | 33 | - | - | 350 |
| 5 | 28 | 62 | 19.2 | - | 8.5 | - | - | - | - | - | - | - | 114 | 5 | 10 | 26 | - | - | 1500 |
| 6 | 4 | 62 | 20.9 | - | 8.6 | - | - | - | - | - | - | - | 124 | 5 | 10 | - | - | - | 1300 |

**MINOR BASIN** SUSQUEHANNA RIVER-NORTH BRANCH

**STATION LOCATION** SUSQUEHANNA RIVER AT
SAYRE, PENNSYLVANIA 76

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 11 | 62 | 22.4 | - | 8.9 | - | 21 | - | - | - | - | - | 118 | 5 | 40 | - | - | - | *50 |
| 6 | 18 | 62 | 22.6 | - | 8.8 | - | - | - | - | - | - | 82 | 104 | 5 | 30 | - | - | - | 50 |
| 6 | 25 | 62 | 22.2 | - | 8.9 | - | - | - | - | - | - | 92 | 126 | 5 | 20 | 26 | .5 | 173 | 350 |
| 7 | 2 | 62 | 22.6 | - | 8.7 | - | - | - | - | - | - | 88 | 122 | 10 | 60 | - | - | - | *50 |
| 7 | 9 | 62 | 24.3 | - | 8.8 | - | - | - | - | - | - | 493 | 132 | 5 | 25 | 25 | .2 | 175 | *50 |
| 7 | 16 | 62 | 21.9 | - | 8.8 | - | - | - | - | - | 20 | 99 | 130 | 5 | 25 | 33 | .3 | - | *50 |
| 7 | 23 | 62 | 22.0 | - | 8.2 | - | - | - | - | - | 13 | 95 | 132 | 5 | 20 | 20 | - | 144 | 20 |
| 7 | 30 | 62 | 20.6 | - | 8.6 | - | - | - | - | - | - | 98 | 136 | 5 | 20 | - | - | - | *10 |
| 8 | 6 | 62 | 22.9 | - | 8.7 | - | - | - | - | - | - | - | 130 | 5 | 20 | - | - | - | 250 |
| 8 | 13 | 62 | 21.1 | - | 7.7 | - | 11 | - | - | - | - | 89 | 118 | 5 | 30 | - | - | - | *10 |
| 8 | 20 | 62 | 20.2 | - | 9.0 | - | - | - | - | - | - | 87 | 96 | 20 | 35 | - | - | - | 670 |
| 8 | 27 | 62 | 22.2 | - | 8.4 | - | - | - | - | - | - | 85 | 96 | 20 | 20 | - | - | - | 73 |
| 9 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *50 |
| 9 | 4 | 62 | 21.0 | - | 8.5 | - | - | - | - | - | - | 85 | 97 | 10 | 20 | - | - | - | - |
| 9 | 10 | 62 | 19.0 | - | 7.9 | - | 15 | - | - | - | 23 | 105 | 120 | 10 | 25 | 29 | .4 | - | *50 |
| 9 | 17 | 62 | 18.2 | - | 7.8 | - | - | - | - | - | - | 104 | 116 | 5 | 25 | - | - | - | *50 |
| 9 | 24 | 62 | 13.7 | - | 8.1 | - | - | - | - | - | 13 | 99 | 114 | 5 | 20 | 24 | .2 | 180 | 100 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Waverly, New York
Operated by U.S. Geological Survey

| | |
|---|---|
| MAJOR BASIN | North Atlantic |
| MINOR BASIN | Susquehanna River-North Branch |
| STATION LOCATION | Susquehanna River at Sayre, Pennsylvania |

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .744 | .660 | 3.300 | 2.800 | 3.200 | 9.400 | 61.200 | 15.100 | 1.640 | .820 | .463 | .400 |
| 2 | .732 | .660 | 3.080 | 2.600 | 3.000 | 8.800 | 64.200 | 15.100 | 1.600 | .808 | .445 | .392 |
| 3 | .720 | .636 | 3.030 | 2.800 | 3.000 | 7.800 | 52.500 | 14.100 | 1.550 | .796 | .427 | .376 |
| 4 | .806 | .636 | 3.010 | 2.700 | 3.100 | 5.400 | 41.100 | 12.800 | 1.490 | .724 | .409 | .376 |
| 5 | .832 | .672 | 2.990 | 3.100 | 3.800 | 4.800 | 28.300 | 11.200 | 1.440 | .678 | .400 | .392 |
| 6 | .858 | .756 | 3.410 | 2.700 | 5.600 | 4.400 | 22.600 | 9.710 | 1.600 | .667 | .454 | .418 |
| 7 | .871 | .884 | 4.260 | 14.500 | 6.400 | 3.900 | 25.200 | 8.720 | 1.810 | .667 | .436 | .409 |
| 8 | .949 | 1.070 | 4.400 | 27.200 | 6.600 | 3.800 | 44.200 | 8.130 | 2.580 | .656 | .472 | .392 |
| 9 | .923 | 1.200 | 3.940 | 22.600 | 4.900 | 3.900 | 42.300 | 7.930 | 2.440 | .645 | .560 | .384 |
| 10 | .845 | 1.260 | 3.460 | 14.200 | 3.500 | 4.000 | 34.200 | 7.400 | 1.870 | .645 | .872 | .384 |
| 11 | .832 | 1.200 | 3.200 | 9.700 | 3.100 | 4.800 | 26.500 | 6.660 | 1.560 | .560 | 1.490 | .418 |
| 12 | .793 | 1.110 | 3.130 | 7.200 | 2.800 | 10.000 | 21.300 | 6.030 | 1.700 | .560 | 2.070 | .463 |
| 13 | .732 | .988 | 3.130 | 5.200 | 2.700 | 25.100 | 20.900 | 5.370 | 1.950 | .580 | 1.640 | .656 |
| 14 | .720 | 1.010 | 3.500 | 5.000 | 2.700 | 33.000 | 23.000 | 4.900 | 1.890 | .550 | 1.230 | .645 |
| 15 | .672 | 1.080 | 3.300 | 5.400 | 2.600 | 23.000 | 22.200 | 4.480 | 1.910 | .530 | 1.020 | .560 |
| 16 | .672 | 1.330 | 2.700 | 12.500 | 2.400 | 15.700 | 19.600 | 4.260 | 1.620 | .520 | .911 | .590 |
| 17 | .660 | 1.590 | 2.300 | 16.000 | 2.350 | 11.900 | 17.100 | 4.120 | 1.420 | .520 | .808 | .520 |
| 18 | .672 | 1.860 | 2.170 | 12.200 | 2.300 | 10.800 | 15.800 | 3.930 | 1.280 | .540 | .724 | .463 |
| 19 | .672 | 2.010 | 2.990 | 8.800 | 2.250 | 10.900 | 16.800 | 3.480 | 1.200 | .530 | .689 | .436 |
| 20 | .696 | 1.970 | 4.580 | 6.200 | 2.100 | 12.500 | 16.900 | 3.220 | 1.110 | .550 | .645 | .454 |
| 21 | .684 | 1.880 | 6.320 | 6.000 | 2.050 | 13.600 | 16.000 | 3.020 | 1.030 | .550 | .601 | .454 |
| 22 | .636 | 1.640 | 6.000 | 5.900 | 2.100 | 20.800 | 14.400 | 2.870 | .992 | .550 | .570 | .427 |
| 23 | .600 | 1.540 | 4.900 | 7.200 | 2.000 | 23.600 | 13.500 | 2.650 | .950 | .550 | .530 | .418 |
| 24 | .576 | 1.750 | 4.400 | 8.800 | 1.900 | 22.500 | 13.000 | 2.630 | .911 | .550 | .490 | .409 |
| 25 | .564 | 3.990 | 3.400 | 8.400 | 2.100 | 19.500 | 12.500 | 2.650 | .898 | .530 | .472 | .427 |
| 26 | .576 | 6.600 | 3.500 | 6.600 | 2.300 | 18.100 | 11.200 | 2.490 | .924 | .520 | .445 | .454 |
| 27 | .588 | 6.480 | 3.880 | 7.400 | 3.500 | 17.800 | 10.000 | 2.330 | 1.080 | .500 | .436 | .463 |
| 28 | .600 | 4.940 | 3.800 | 9.400 | 6.600 | 18.600 | 9.000 | 2.070 | 1.200 | .490 | .436 | .796 |
| 29 | .588 | 4.150 | 3.400 | 8.800 | | 18.600 | 8.600 | 1.950 | 1.030 | .510 | .427 | 1.270 |
| 30 | .600 | 3.690 | 3.000 | 6.200 | | 20.600 | 10.600 | 1.810 | .898 | .490 | .427 | 1.400 |
| 31 | .612 | | 3.000 | 4.100 | | 31.100 | | 1.680 | | .472 | .418 | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** TENNESSEE
**MAJOR BASIN** TENNESSEE RIVER
**MINOR BASIN** TENN. RIVER-MAIN STEM & MINOR TRIB.
**STATION LOCATION** TENNESSEE RIVER AT
PICKWICK LANDING, TENNESSEE 99

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 24 | 61 | 11 | 2 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 4 | 33 | 6 | 33 | 7 | | | | | | |
| 11 | 7 | 61 | 11 | 22 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 4 | 27 | 5 | 30 | 6 | | | | | | |
| 11 | 14 | 61 | 11 | 28 | 0 | 0 | 0 | 1 | 0 | 1 | 20 | 4 | 20 | 5 | 40 | 6 | | | | | | |
| 11 | 21 | 61 | 12 | 4 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 4 | 13 | 5 | 13 | 6 | | | | | | |
| 11 | 28 | 61 | 12 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 19 | 4 | 22 | 6 | | | | | | |
| 12 | 5 | 61 | 12 | 14 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 5 | 23 | 6 | 27 | 8 | | | | | | |
| 12 | 12 | 61 | 12 | 21 | 0 | 1 | 0 | 1 | 0 | 1 | 12 | 4 | 24 | 5 | 36 | 6 | | | | | | |
| 12 | 19 | 61 | 1 | 2 | 1 | 1 | 0 | 1 | 1 | 1 | 27 | 5 | 51 | 5 | 78 | 7 | | | | | | |
| 12 | 27 | 61 | 1 | 10 | 0 | 1 | 0 | 1 | 0 | 1 | 11 | 4 | 44 | 5 | 55 | 6 | | | | | | |
| 1 | 9 | 62 | 1 | 18 | 0 | 1 | 0 | 0 | 0 | 1 | 50 | 5 | 57 | 5 | 107 | 7 | | | | | | |
| 1 | 16 | 62 | 1 | 24 | 1 | 1 | 0 | 1 | 1 | 1 | 56 | 6 | 44 | 6 | 100 | 8 | | | | | | |
| 1 | 23 | 62 | 2 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 15 | 4 | 38 | 5 | 53 | 6 | | | | | | |
| 1 | 30 | 62 | 2 | 9 | 1 | 1 | 0 | 1 | 1 | 1 | 47 | 5 | 58 | 6 | 105 | 7 | | | | | | |
| 2 | 6 | 62 | 2 | 19 | 0 | 1 | 0 | 1 | 0 | 1 | 47 | 5 | 51 | 5 | 98 | 7 | | | | | | |
| 2 | 13 | 62 | 2 | 23 | 2 | 2 | 0 | 1 | 2 | 2 | 198 | 9 | 12 | 4 | 210 | 9 | | | | | | |
| 2 | 20 | 62 | 3 | 5 | 1 | 1 | 0 | 1 | 1 | 1 | 83 | 6 | 50 | 5 | 133 | 8 | | | | | | |
| 2 | 27 | 62 | 3 | 9 | 0 | 1 | 0 | 1 | 0 | 1 | 52 | 5 | 34 | 5 | 86 | 7 | | | | | | |
| 3 | 8 | 62 | 3 | 20 | 1 | 1 | 0 | 1 | 1 | 1 | 27 | 5 | 40 | 5 | 67 | 7 | | | | | | |
| 3 | 13 | 62 | 3 | 27 | 1 | 1 | 0 | 1 | 1 | 1 | 26 | 5 | 49 | 5 | 75 | 7 | | | | | | |
| 3 | 20 | 62 | 3 | 29 | 0 | 1 | 0 | 0 | 0 | 1 | 26 | 4 | 35 | 5 | 61 | 6 | | | | | | |
| 3 | 27 | 62 | 4 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 33 | 5 | 39 | 5 | 72 | 7 | | | | | | |
| 4 | 3 | 62 | 4 | 17 | 0 | 1 | 0 | 0 | 0 | 1 | 35 | 4 | 39 | 5 | 74 | 6 | | | | | | |
| 4 | 10 | 62 | 4 | 25 | 0 | 1 | 0 | 1 | 0 | 1 | 27 | 4 | 37 | 5 | 64 | 6 | | | | | | |
| 4 | 17 | 62 | 4 | 30 | 1 | 1 | 0 | 1 | 1 | 1 | 31 | 5 | 42 | 7 | 73 | 9 | | | | | | |
| 4 | 24 | 62 | 5 | 24 | 0 | 1 | 0 | 0 | 0 | 1 | 37 | 6 | 36 | 7 | 73 | 9 | | | | | | |
| 5 | 1 | 62 | 6 | 5 | 1 | 1 | 0 | 0 | 1 | 1 | 17 | 5 | 26 | 6 | 43 | 7 | | | | | | |
| 5 | 8 | 62 | 6 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 6 | 21 | 7 | 29 | 9 | | | | | | |
| 5 | 14 | 62 | 6 | 19 | 1 | 1 | 0 | 1 | 1 | 1 | 7 | 5 | 27 | 6 | 34 | 8 | | | | | | |
| 5 | 21 | 62 | 6 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 35 | 6 | 40 | 8 | | | | | | |
| 5 | 29 | 62 | 6 | 29 | 1 | 1 | 0 | 1 | 1 | 1 | 27 | 6 | 38 | 6 | 65 | 8 | | | | | | |
| 6 | 5 | 62 | 7 | 5 | 1 | 1 | 0 | 0 | 1 | 1 | 10 | 6 | 42 | 7 | 52 | 9 | | | | | | |
| 6 | 12 | 62 | 7 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 3 | 44 | 4 | 50 | 5 | | | | | | |
| 6 | 19 | 62 | 7 | 16 | 0 | 1 | 0 | 0 | 0 | 1 | 5 | 12 | 25 | 6 | 30 | 13 | | | | | | |
| 6 | 26 | 62 | 8 | 3 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 3 | 33 | 4 | 38 | 5 | | | | | | |
| 7 | 3 | 62 | 9 | 12 | 1 | 0 | 0 | 0 | 1 | 0 | 3 | 5 | 22 | 5 | 25 | 7 | | | | | | |
| 7 | 9 | 62 | 8 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 26 | 6 | 29 | 8 | | | | | | |
| 7 | 17 | 62 | 8 | 8 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 5 | 18 | 5 | 20 | 7 | | | | | | |
| 7 | 24 | 62 | 8 | 24 | 1 | 1 | 0 | 1 | 1 | 1 | 22 | 6 | 17 | 5 | 39 | 7 | | | | | | |
| 7 | 30 | 62 | 8 | 21 | 1 | 1 | 0 | 1 | 1 | 1 | 16 | 7 | 17 | 6 | 33 | 9 | | | | | | |
| 8 | 7 | 62 | 8 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 4 | 0 | 7 | 8 | 10 | | | | | | |
| 8 | 14 | 62 | 8 | 30 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 5 | 16 | 6 | 22 | 7 | | | | | | |

# RADIOACTIVITY DETERMINATIONS

**MINOR BASIN** TENN. RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** TENNESSEE RIVER AT

PICKWICK LANDING, TENNESSEE

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 8 | 21 | 62 | 9 | 6 | 2 | 2 | 0 | 0 | 2 | 2 | 11 | 12 | 22 | 6 | 33 | 13 | | | | | | | |
| 8 | 28 | 62 | 9 | 14 | 1 | 1 | 0 | 1 | 1 | 1 | 13 | 7 | 21 | 6 | 34 | 9 | | | | | | | |
| 9 | 5 | 62 | 9 | 28 | - | - | - | - | - | - | 25 | 7 | 27 | 6 | 52 | 9 | | | | | | | |
| 9 | 12 | 62 | 9 | 28 | 0 | 1 | 0 | 0 | 0 | 1 | 13 | 7 | 44 | 8 | 57 | 11 | | | | | | | |
| 9 | 19 | 62 | 10 | 10 | 2 | 2 | 0 | 1 | 2 | 2 | 18 | 13 | 52 | 8 | 70 | 15 | | | | | | | |
| 9 | 25 | 62 | 10 | 19 | 0 | 1 | 0 | 0 | 0 | 1 | 7 | 4 | 29 | 5 | 36 | 6 | | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** TENNESSEE
**MAJOR BASIN** TENNESSEE RIVER
**MINOR BASIN** TENN. RIVER-MAIN STEM & MINOR TRIB.
**STATION LOCATION** TENNESSEE RIVER AT
PICKWICK LANDING, TENNESSEE 99

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 24 | 61 | 300 | 0 | 0 | 0 | 0 | 210 | 0 | 60 | 20 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 14 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 20 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 11 | 28 | 61 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 13 | 61 | 300 | 0 | 0 | 0 | 0 | 40 | 0 | 230 | 60 | 100 | 40 | | | | | | | | | | | | | | | | | | | | |
| 12 | 27 | 61 | 200 | 0 | 0 | 20 | 0 | 0 | 0 | 80 | 60 | 80 | 60 | | | | | | | | | | | | | | | | | | | | |
| 1 | 16 | 62 | 200 | 0 | 0 | 0 | 0 | 70 | 0 | 90 | 20 | 50 | 70 | | | | | | | | | | | | | | | | | | | | |
| 2 | 6 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 90 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 2 | 20 | 62 | 400 | 0 | 0 | 0 | 0 | 310 | 20 | 0 | 20 | 0 | 20 | 57 | 2 | | | | | | | | | | | | | | | | | | |
| 3 | 8 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 20 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 20 | 62 | 100 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 20 | 40 | 40 | | | | | | | | | | | | | | | | | | | | |
| 4 | 3 | 62 | 300 | 0 | 0 | 0 | 0 | 0 | 40 | 150 | 100 | 20 | 20 | | | | | | | | | | | | | | | | | | | | |
| 4 | 17 | 62 | 300 | 20 | 0 | 20 | 100 | 20 | 20 | 80 | 60 | 20 | 40 | | | | | | | | | | | | | | | | | | | | |
| 5 | 8 | 62 | 9600 | 0 | 0 | 190 | * | 1240 | 20 | 1660 | 250 | 370 | 0 | 50 | 6 | 71 | 4 | 51 | 4 | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 2200 | 80 | 0 | 230 | 20 | 120 | 80 | 1300 | 390 | 390 | 40 | 68 | 3 | | | | | | | | | | | | | | | | | | |
| 6 | 5 | 62 | 1500 | 90 | 0 | 160 | 200 | 110 | 0 | 660 | 270 | 160 | 0 | 68 | 2 | 92 | 1 | 50 | 1 | 69 | 1 | | | | | | | | | | | | |
| 6 | 19 | 62 | 2200 | 230 | 0 | 330 | 350 | 460 | 0 | 480 | 310 | 350 | 20 | 50 | 2 | 68 | 1 | 3 | 1 | 54 | 1 | 51 | 1 | 69 | 1 | 92 | 1 | | | | | | |
| 7 | 3 | 62 | 2100 | 120 | 0 | 120 | 330 | 370 | 120 | 410 | 580 | 210 | 120 | 92 | 2 | 50 | 2 | 51 | 2 | 68 | 1 | | | | | | | | | | | | |
| 7 | 17 | 62 | 1100 | 0 | 0 | 100 | 80 | 40 | 40 | 310 | 540 | 40 | 40 | 69 | 1 | 68 | 1 | 92 | 1 | | | | | | | | | | | | | | |
| 8 | 7 | 62 | 700 | 0 | 20 | 80 | 130 | 120 | 0 | 80 | 250 | 40 | 40 | 32 | 1 | | | | | | | | | | | | | | | | | | |
| 8 | 21 | 62 | 2100 | 40 | 0 | 40 | 950 | 270 | 40 | 620 | 120 | 40 | 0 | 50 | 3 | 68 | 2 | 51 | 1 | | | | | | | | | | | | | | |
| 9 | 5 | 62 | 1000 | 0 | 0 | 80 | 270 | 270 | 0 | 210 | 120 | 120 | 0 | 50 | 1 | 51 | 1 | | | | | | | | | | | | | | | | |
| 9 | 19 | 62 | 1200 | 0 | 0 | 40 | 120 | 660 | 0 | 370 | 40 | 80 | 40 | 51 | 3 | 68 | 1 | | | | | | | | | | | | | | | | |
| *5 | 8 | 62 | | | | | 6210 | | | | | | | | | | | | | | | | | | | | | | | | | | |

**MINOR BASIN** TENN. RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** TENNESSEE RIVER AT

PICKWICK LANDING, TENNESSEE 099

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA *(Identifiable) Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 24 | 61 | 82 | 27 | 56 | 16 | 23 | 8 | 57 | 5 | 44 | 0 | 0 | 24 | 22 | 1 | | | | | | | | | 4 | 51 | 1 | | | | | 0 | 0 |
| 11 | 14 | 61 | | | | | | | | | | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 28 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 12 | 13 | 61 | 10 | 33 | 56 | 13 | 57 | 7 | 92 | 6 | 41 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 27 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 16 | 62 | | | | | | | | | | 20 | 10 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 6 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 20 | 62 | 57 | 13 | 82 | 10 | 58 | 7 | 92 | 6 | 64 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 8 | 62 | 62 | 14 | 57 | 9 | 97 | 8 | 86 | 7 | 62 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 20 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 3 | 62 | 62 | 29 | 92 | 11 | 57 | 5 | 82 | 5 | 50 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 17 | 62 | 62 | 27 | 61 | 9 | 27 | 9 | 71 | 7 | 48 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 5 | 8 | 62 | 82 | 73 | 56 | 8 | 57 | 8 | 70 | 2 | 9 | 0 | 0 | 15 | 21 | 1 | | | | | | | | | 3 | 51 | 1 | | | | | 0 | 0 |
| 5 | 21 | 62 | 27 | 51 | 92 | 9 | 57 | 4 | 28 | 3 | 33 | 20 | 0 | 1690 | 2 | 8 | 17 | 6 | 22 | 4 | 11 | 4 | 21 | 3 | 112 | 51 | 5 | 50 | 4 | 52 | 3 | 0 | 1 |
| 6 | 5 | 62 | 58 | 34 | 92 | 20 | 27 | 19 | 56 | 13 | 14 | 0 | 0 | 54 | 11 | 2 | 21 | 2 | 22 | 1 | | | | | 10 | 50 | 1 | | | | | 2 | 0 |
| 6 | 19 | 62 | 56 | 22 | 92 | 19 | 27 | 19 | 58 | 13 | 27 | 40 | 0 | 1120 | 17 | 6 | 2 | 6 | 11 | 6 | 22 | 5 | 21 | 5 | 30 | 50 | 4 | 51 | 1 | | | 1 | 6 |
| 7 | 3 | 62 | 92 | 58 | 56 | 10 | 58 | 7 | 32 | 4 | 21 | 0 | 0 | 52 | 17 | 2 | 11 | 2 | 22 | 1 | 16 | 1 | | | 4 | 50 | 1 | | | | | 5 | 2 |
| 7 | 17 | 62 | 27 | 36 | 58 | 18 | 92 | 11 | 71 | 7 | 28 | 0 | 0 | 265 | 17 | 4 | 1 | 4 | 46 | 4 | 21 | 4 | 2 | 2 | 97 | 50 | 5 | 76 | 1 | 51 | 1 | 3 | 0 |
| 8 | 7 | 62 | 27 | 44 | 32 | 12 | 28 | 9 | 71 | 5 | 30 | 0 | 0 | 357 | 17 | 5 | 2 | 4 | 15 | 3 | 22 | 3 | 18 | 3 | 18 | 50 | 3 | | | | | 6 | 3 |
| 8 | 21 | 62 | 26 | 32 | 27 | 30 | 82 | 13 | 23 | 8 | 17 | 0 | 0 | 1760 | 17 | 8 | 22 | 7 | 21 | 4 | 18 | 3 | 2 | 2 | 2 | | | | | | | 0 | 0 |
| 9 | 5 | 62 | 27 | 52 | 26 | 5 | 57 | 4 | 71 | 4 | 35 | 0 | 0 | 451 | 17 | 6 | 22 | 4 | 2 | 3 | 11 | 3 | 18 | 3 | 0 | | | | | | | 3 | 0 |
| 9 | 19 | 62 | 26 | 60 | 23 | 8 | 27 | 7 | 82 | 7 | 18 | 0 | 0 | 106 | 22 | 4 | 17 | 3 | 11 | 2 | 18 | 1 | 2 | 1 | 9 | 50 | 1 | 51 | 1 | 76 | 1 | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

## ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*

*(Parts per billion)*

| | |
|---|---|
| **STATE** | TENNESSEE |
| **MAJOR BASIN** | TENNESSEE RIVER |
| **MINOR BASIN** | TENN. RIVER-MAIN STEM & MINOR TRIB. |
| **STATION LOCATION** | TENNESSEE RIVER AT<br>PICKWICK LANDING, TENNESSEE 9 |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLOROFORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGENATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 24 | 61 | 11 | 7 | 4520 | 159 | 53 | 106 | 2 | 11 | 21 | 4 | 2 | 15 | 0 | 6 | 4 | 1 | 8 |
| 12 | 12 | 61 | 12 | 27 | 2145 | * | 86 | * | 2 | 34 | 20 | 1 | 1 | 17 | 1 | 9 | 5 | 3 | 13 |
| 1 | 9 | 62 | 1 | 23 | 5095 | 175 | 64 | 111 | 4 | 16 | 14 | 1 | 1 | 12 | 0 | 6 | 5 | 1 | 18 |
| 2 | 13 | 62 | 2 | 27 | 4821 | 125 | 35 | 90 | 3 | 7 | 12 | 1 | 1 | 10 | 0 | 4 | 2 | 1 | 6 |
| 3 | 20 | 62 | 3 | 27 | 2440 | 173 | 51 | 122 | 5 | 13 | 14 | 2 | 2 | 10 | 0 | 5 | 3 | 1 | 10 |
| 4 | 17 | 62 | 4 | 24 | 4530 | * | 54 | * | 2 | 16 | 13 | 1 | 1 | 11 | 0 | 5 | 5 | 1 | 12 |
| 5 | 21 | 62 | 5 | 29 | 1581 | 244 | 99 | 145 | 3 | 30 | 26 | 4 | 2 | 19 | 1 | 10 | 11 | 2 | 17 |
| 6 | 12 | 62 | 6 | 19 | 4450 | 129 | 67 | 62 | 1 | 19 | 17 | 0 | 1 | 15 | 1 | 9 | 7 | 1 | 13 |
| 7 | 17 | 62 | 7 | 31 | 4330 | 155 | 51 | 104 | 1 | 12 | 16 | 1 | 1 | 13 | 1 | 10 | 3 | 1 | 8 |
| 8 | 14 | 62 | 8 | 28 | 5220 | 102 | 44 | 58 | 0 | 11 | 19 | 1 | 1 | 17 | 0 | 5 | 2 | 1 | 6 |
| 9 | 11 | 62 | 9 | 25 | 6220 | 145 | 36 | 109 | 0 | 8 | 13 | 1 | 1 | 10 | 1 | 3 | 4 | 1 | 7 |

* LABORATORY ACCIDENT

NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

STATE TENNESSEE
MAJOR BASIN TENNESSEE RIVER
MINOR BASIN TENN. RIVER-MAIN STEM & MINOR TRIB.
STATION LOCATION TENNESSEE RIVER AT
PICKWICK LANDING, TENNESSEE 99

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 11 | 7 | 61 | - | - | - | - | - | - | - | - | 31 | 38 | 72 | 5 | - | 15 | - | - | - |
| 11 | 28 | 61 | - | - | - | - | 10 | - | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 12 | 61 | - | - | - | - | - | - | - | - | 20 | 48 | 72 | - | - | - | - | - | - |
| 12 | 19 | 61 | - | - | - | - | - | - | - | - | 15 | 48 | 64 | - | 175 | 16 | - | - | - |
| 1 | 2 | 62 | - | - | - | - | - | - | - | - | 10 | 44 | 72 | 5 | - | 17 | - | - | - |
| 2 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 11 | .1 | - | - |
| 2 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | - | 10 | - | - | - |
| 2 | 27 | 62 | - | - | - | - | 11 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 2 | 62 | - | 11.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 7 | 62 | - | 11.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 13 | 62 | - | 11.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 20 | 62 | - | 11.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 22 | 62 | - | - | - | - | 17 | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 27 | 62 | - | 11.1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 3 | 62 | - | 10.1 | - | - | - | - | - | - | 7 | 16 | 64 | 5 | - | 11 | - | 62 | - |
| 4 | 12 | 62 | - | 9.3 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 17 | 62 | - | 9.8 | - | - | - | - | - | - | 5 | - | - | 5 | - | - | .0 | - | - |
| 4 | 21 | 62 | - | - | - | - | - | - | - | - | 8 | - | 64 | 5 | - | 17 | .0 | - | - |
| 4 | 24 | 62 | - | 9.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 1 | 62 | - | 8.8 | - | - | - | - | - | - | 5 | 52 | 60 | 5 | 275 | 10 | .0 | - | - |
| 5 | 6 | 62 | - | - | - | - | - | - | - | - | 5 | 50 | 64 | 5 | 0 | 13 | - | - | - |
| 5 | 8 | 62 | - | 9.8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 15 | 62 | - | 9.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 21 | 62 | - | - | - | - | - | - | - | - | 6 | - | - | - | - | 10 | - | 72 | - |
| 5 | 22 | 62 | - | 7.7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 29 | 62 | - | 7.7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 5 | 62 | - | 7.7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 12 | 62 | - | 8.4 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 19 | 62 | - | 8.0 | 7.8 | - | - | - | - | - | 3 | 86 | 80 | 5 | *25 | 11 | .0 | 66 | - |
| 6 | 26 | 62 | - | 7.0 | - | - | 11 | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 3 | 62 | - | 7.2 | - | - | - | - | - | - | 7 | 50 | 72 | 5 | *25 | - | - | - | - |
| 7 | 10 | 62 | - | 6.8 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 17 | 62 | - | 5.9 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 24 | 62 | - | 6.9 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 31 | 62 | - | 7.0 | - | - | - | - | - | - | 8 | 28 | 56 | 5 | 25 | 10 | - | 50 | - |
| 8 | 7 | 62 | - | 6.8 | - | - | - | - | - | - | 9 | 48 | 68 | 5 | 25 | 17 | - | - | - |
| 8 | 14 | 62 | - | 6.8 | - | - | - | - | - | - | 9 | - | 80 | 5 | 25 | 17 | - | - | - |
| 8 | 21 | 62 | - | 7.5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 28 | 62 | - | 6.3 | - | - | 20 | - | - | - | - | - | - | - | - | - | - | - | - |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** TENNESSEE

**MAJOR BASIN** TENNESSEE RIVER

**MINOR BASIN** TENN. RIVER-MAIN STEM + MINOR TRIB.

**STATION LOCATION** TENNESSEE RIVER AT

PICKWICK LANDING, TENNESSEE 99

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 9 | 4 | 62 | - | 7.7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 11 | 62 | - | 6.9 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 18 | 62 | - | 6.7 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 19 | 62 | - | - | - | - | - | - | - | - | 12 | 52 | 64 | 0 | 117 | - | - | 93 | - |
| 9 | 25 | 62 | - | 6.6 | 7.8 | - | - | - | - | - | 12 | 52 | - | 0 | *25 | 16 | - | 107 | - |
| 9 | 26 | 62 | - | - | - | - | 10 | - | - | - | - | - | - | - | - | - | - | - | - |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Savannah, Tennessee
Data Furnished by Tennessee Valley Authority
through U.S. Geological Survey

MAJOR BASIN Tennessee River

MINOR BASIN Tennessee River-Main Stem & Minor Trib.

STATION LOCATION Tennessee River at

Pickwick Landing, Tennessee

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 22.600 | 35.300 | 30.600 | 95.300 | 273.000 | 326.000 | 87.800 | 56.400 | 49.800 | 31.200 | 28.300 | 31.100 |
| 2 | 46.300 | 35.000 | 34.100 | 80.900 | 266.000 | 328.000 | 81.000 | 48.800 | 39.800 | 44.200 | 33.200 | 31.600 |
| 3 | 47.700 | 38.900 | 29.800 | 68.200 | 231.000 | 315.000 | 76.900 | 47.000 | 28.500 | 38.600 | 34.600 | 29.200 |
| 4 | 48.400 | 35.900 | 38.400 | 71.600 | 186.000 | 296.000 | 65.200 | 47.200 | 39.200 | 25.900 | 46.500 | 36.200 |
| 5 | 28.300 | 33.600 | 40.000 | 84.000 | 166.000 | 273.000 | 60.200 | 46.300 | 48.300 | 33.600 | 35.300 | 32.300 |
| 6 | 32.400 | 42.300 | 39.000 | 131.000 | 140.000 | 226.000 | 73.400 | 52.200 | 41.200 | 40.600 | 34.300 | 30.900 |
| 7 | 38.100 | 40.100 | 38.200 | 149.000 | 115.000 | 203.000 | 86.000 | 51.900 | 37.900 | 53.400 | 31.000 | 32.500 |
| 8 | 30.700 | 36.800 | 35.000 | 147.000 | 97.800 | 187.000 | 72.800 | 49.100 | 39.600 | 55.200 | 34.900 | 28.800 |
| 9 | 42.100 | 40.400 | 41.000 | 141.000 | 73.400 | 175.000 | 85.800 | 44.900 | 42.900 | 46.700 | 38.600 | 37.000 |
| 10 | 25.600 | 37.900 | 72.100 | 121.000 | 71.700 | 170.000 | 86.300 | 44.400 | 33.000 | 44.000 | 42.400 | 37.100 |
| 11 | 30.700 | 32.300 | 96.100 | 92.300 | 62.400 | 176.000 | 103.000 | 46.300 | 37.100 | 38.200 | 41.800 | 37.200 |
| 12 | 42.000 | 28.300 | 142.000 | 84.200 | 66.800 | 177.000 | 193.000 | 44.000 | 38.600 | 39.200 | 23.800 | 27.800 |
| 13 | 42.500 | 43.600 | 171.000 | 74.100 | 67.200 | 165.000 | 219.000 | 42.200 | 48.300 | 41.300 | 37.700 | 25.900 |
| 14 | 21.700 | 41.500 | 192.000 | 63.900 | 58.400 | 152.000 | 210.000 | 42.200 | 43.400 | 48.200 | 25.700 | 33.400 |
| 15 | 25.900 | 38.300 | 189.000 | 85.900 | 65.600 | 143.000 | 193.000 | 39.400 | 38.300 | 41.700 | 26.500 | 32.400 |
| 16 | 40.000 | 24.500 | 184.000 | 92.100 | 76.100 | 125.000 | 164.000 | 44.000 | 37.400 | 42.900 | 24.100 | 27.300 |
| 17 | 31.100 | 57.400 | 199.000 | 74.500 | 54.000 | 106.000 | 140.000 | 44.800 | 36.800 | 35.900 | 19.400 | 33.300 |
| 18 | 33.300 | 43.300 | 241.000 | 74.700 | 55.900 | 91.000 | 111.000 | 49.900 | 46.100 | 33.900 | 43.400 | 40.300 |
| 19 | 31.400 | 31.300 | 270.000 | 83.700 | 65.700 | 87.700 | 90.300 | 32.500 | 46.100 | 37.400 | 36.800 | 37.100 |
| 20 | 44.500 | 39.800 | 285.000 | 78.300 | 76.200 | 85.100 | 88.800 | 32.000 | 44.200 | 33.100 | 28.400 | 37.600 |
| 21 | 35.600 | 36.800 | 290.000 | 75.200 | 71.000 | 82.900 | 78.400 | 39.400 | 50.300 | 48.700 | 24.800 | 35.100 |
| 22 | 28.800 | 38.000 | 285.000 | 77.000 | 86.900 | 82.700 | 74.400 | 28.600 | 48.600 | 38.300 | 23.200 | 30.800 |
| 23 | 35.100 | 35.400 | 259.000 | 88.700 | 123.000 | 83.100 | 69.300 | 39.500 | 45.800 | 33.500 | 28.800 | 21.900 |
| 24 | 39.500 | 54.000 | 217.000 | 108.000 | 191.000 | 82.200 | 56.300 | 34.400 | 46.800 | 32.600 | 23.100 | 34.600 |
| 25 | 36.700 | 38.400 | 185.000 | 130.000 | 253.000 | 83.400 | 56.500 | 26.500 | 43.400 | 31.600 | 45.000 | 27.200 |
| 26 | 36.800 | 28.700 | 155.000 | 170.000 | 278.000 | 92.900 | 60.400 | 37.400 | 37.300 | 44.100 | 36.900 | 26.000 |
| 27 | 42.200 | 44.200 | 143.000 | 196.000 | 303.000 | 95.800 | 60.900 | 35.500 | 31.600 | 43.600 | 36.400 | 30.000 |
| 28 | 43.200 | 37.000 | 121.000 | 227.000 | 319.000 | 87.400 | 65.400 | 40.000 | 34.700 | 44.500 | 31.400 | 28.400 |
| 29 | 29.900 | 35.300 | 93.800 | 256.000 |  | 72.500 | 54.400 | 39.900 | 49.700 | 42.500 | 26.100 | 28.300 |
| 30 | 33.800 | 33.100 | 93.100 | 268.000 |  | 64.600 | 61.900 | 31.000 | 51.500 | 33.000 | 26.700 | 25.600 |
| 31 | 33.200 |  | 98.400 | 270.000 |  | 64.600 |  | 34.400 |  | 35.900 | 29.400 |  |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** ALABAMA

**MAJOR BASIN** TENNESSEE RIVER

**MINOR BASIN** TENN. RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** TENNESSEE RIVER AT
BRIDGEPORT, ALABAMA 77

| DATE OF SAMPLE | | | ALGAE (Number per milliliter) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 11 | 61 | 100 | 0 | 0 | 20 | 0 | 20 | 0 | 0 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 8 | 61 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 22 | 61 | 200 | 50 | 0 | 0 | 0 | 20 | 20 | 70 | 0 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 6 | 61 | 100 | 0 | 0 | 0 | 0 | 40 | 0 | 20 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 21 | 61 | 200 | 0 | 0 | 0 | 0 | 80 | 0 | 20 | 100 | 0 | 60 | | | | | | | | | | | | | | | | | | | | |
| 1 | 3 | 62 | 300 | 0 | 0 | 0 | 0 | 50 | 50 | 110 | 140 | 50 | 0 | | | | | | | | | | | | | | | | | | | | |
| 1 | 17 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 50 | 110 | 90 | 20 | 110 | | | | | | | | | | | | | | | | | | | | |
| 1 | 31 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 140 | 50 | 20 | | | | | | | | | | | | | | | | | | | | |
| 2 | 14 | 62 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 150 | 150 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 2 | 28 | 62 | 500 | 0 | 0 | 0 | 0 | 40 | 20 | 250 | 170 | 40 | 100 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 14 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 120 | 0 | 60 | | | | | | | | | | | | | | | | | | | | |
| 3 | 28 | 62 | 200 | 0 | 0 | 0 | 0 | 0 | 40 | 60 | 150 | 40 | 20 | | | | | | | | | | | | | | | | | | | | |
| 4 | 11 | 62 | 200 | 0 | 0 | 0 | 0 | 50 | 0 | 70 | 50 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 5 | 9 | 62 | 500 | 0 | 0 | 40 | 0 | 0 | 0 | 210 | 270 | 170 | 40 | | | | | | | | | | | | | | | | | | | | |
| 5 | 23 | 62 | 300 | 0 | 0 | 20 | 0 | 0 | 0 | 170 | 150 | 0 | 60 | | | | | | | | | | | | | | | | | | | | |
| 6 | 6 | 62 | 200 | 0 | 0 | 50 | 0 | 0 | 0 | 110 | 20 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 6 | 20 | 62 | 900 | 0 | 0 | 40 | 0 | 0 | 0 | 680 | 210 | 210 | 40 | 69 | 2 | | | | | | | | | | | | | | | | | | |
| 7 | 5 | 62 | 15200 | 15030 | 0 | 0 | 0 | 40 | 0 | 40 | 40 | 0 | 0 | 3 | 3 | | | | | | | | | | | | | | | | | | |
| 7 | 19 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 1 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 8 | 15 | 62 | 2300 | 0 | 0 | 0 | 40 | 60 | 40 | 1330 | 790 | 210 | 370 | 68 | 4 | | | | | | | | | | | | | | | | | | |
| 8 | 29 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 9 | 12 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 10 | 0 | | | | | | | | | | | | | | | | | | | | |
| 9 | 26 | 62 | 00 | 0 | 0 | 10 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 11 | 61 | 27 | 23 | 82 | 12 | 56 | 11 | 23 | 6 | 48 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 8 | 61 | 10 | 13 | 62 | 9 | 56 | 9 | 16 | 7 | 62 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 22 | 61 | | | | | | | | | | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 6 | 61 | | | | | | | | | | 20 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 21 | 61 | 47 | 13 | 83 | 12 | 56 | 7 | 92 | 5 | 63 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 3 | 62 | 57 | 14 | 56 | 9 | 2 | 7 | 71 | 4 | 66 | 20 | 10 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 17 | 62 | 83 | 22 | 57 | 9 | 62 | 8 | 92 | 4 | 57 | 410 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 31 | 62 | 57 | 19 | 58 | 5 | 92 | 5 | 56 | 3 | 68 | 50 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 14 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 2 | 28 | 62 | 62 | 10 | 61 | 6 | 96 | 5 | 83 | 4 | 75 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 14 | 62 | 27 | 14 | 61 | 9 | 71 | 6 | 2 | 6 | 65 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 28 | 62 | 61 | 10 | 57 | 8 | 64 | 6 | 82 | 6 | 70 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 11 | 62 | 61 | 21 | 62 | 7 | 64 | 7 | 65 | 3 | 62 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 5 | 9 | 62 | 61 | 23 | 92 | 16 | 58 | 5 | 71 | 4 | 52 | 0 | 0 | 0 | | | | | | | | | | | 19 | 51 | 3 | | | | | 0 | 1 |
| 5 | 23 | 62 | 62 | 9 | 61 | 8 | 71 | 8 | 92 | 7 | 68 | 20 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 6 | 6 | 62 | 56 | 22 | 33 | 10 | 47 | 9 | 62 | 6 | 53 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 20 | 62 | 56 | 29 | 57 | 17 | 92 | 11 | 58 | 7 | 36 | 0 | 0 | 65 | 22 | 4 | 17 | 2 | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 5 | 62 | 92 | 11 | 56 | 9 | 58 | 7 | 10 | 6 | 67 | 0 | 0 | 7 | 17 | 1 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 19 | 62 | 56 | 17 | 71 | 10 | 16 | 7 | 92 | 5 | 61 | 0 | 0 | 2 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 8 | 1 | 62 | 56 | 18 | 27 | 17 | 92 | 8 | 71 | 8 | 49 | 0 | 0 | 24 | 11 | 2 | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 8 | 15 | 62 | 28 | 17 | 56 | 17 | 16 | 9 | 57 | 9 | 48 | 0 | 0 | 26 | 11 | 1 | 22 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 29 | 62 | 57 | 21 | 27 | 10 | 92 | 7 | 71 | 6 | 56 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 12 | 62 | 57 | 49 | 82 | 10 | 56 | 9 | 92 | 4 | 28 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 26 | 62 | 57 | 20 | 27 | 13 | 16 | 11 | 92 | 8 | 48 | 0 | 0 | 5 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** ALABAMA

**MAJOR BASIN** TENNESSEE RIVER

**MINOR BASIN** TENN. RIVER-MAIN STEM & MINOR TRIB

**STATION LOCATION** TENNESSEE RIVER AT
BRIDGEPORT, ALABAMA

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 11 | 61 | 10 | 30 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 4 | 26 | 5 | 32 | 6 | | | | | | | |
| 10 | 25 | 61 | 11 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 4 | 9 | 5 | 9 | 6 | | | | | | | |
| 11 | 8 | 61 | 11 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 11 | 6 | 11 | 8 | | | | | | | |
| 11 | 22 | 61 | 12 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 4 | 26 | 5 | 33 | 6 | | | | | | | |
| 12 | 6 | 61 | 12 | 14 | 0 | 1 | 0 | 1 | 0 | 1 | 12 | 4 | 50 | 6 | 62 | 7 | | | | | | | |
| 12 | 21 | 61 | 1 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 18 | 5 | 51 | 5 | 69 | 7 | | | | | | | |
| 1 | 3 | 62 | 1 | 11 | – | – | – | – | – | – | 10 | 5 | 21 | 6 | 31 | 8 | | | | | | | |
| 1 | 17 | 62 | 1 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 5 | 43 | 6 | 70 | 8 | | | | | | | |
| 1 | 31 | 62 | 2 | 12 | – | – | – | – | – | – | 59 | 7 | 56 | 6 | 115 | 9 | | | | | | | |
| 2 | 14 | 62 | 2 | 27 | – | – | – | – | – | – | 15 | 5 | 23 | 6 | 38 | 8 | | | | | | | |
| 2 | 28 | 62 | 3 | 13 | 2 | 1 | 0 | 1 | 2 | 1 | 65 | 6 | 77 | 6 | 142 | 8 | | | | | | | |
| 3 | 14 | 62 | 3 | 26 | – | – | – | – | – | – | 24 | 5 | 35 | 5 | 59 | 7 | | | | | | | |
| 3 | 28 | 62 | 4 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 10 | 4 | 19 | 5 | 29 | 6 | | | | | | | |
| 4 | 11 | 62 | 4 | 26 | – | – | – | – | – | – | 12 | 5 | 37 | 6 | 49 | 7 | | | | | | | |
| 4 | 25 | 62 | 5 | 28 | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 7 | 67 | 5 | 69 | 9 | | | | | | | |
| 5 | 9 | 62 | 6 | 19 | – | – | – | – | – | – | 6 | 6 | 48 | 7 | 54 | 9 | | | | | | | |
| 5 | 23 | 62 | 6 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 29 | 6 | 30 | 8 | | | | | | | |
| 6 | 6 | 62 | 7 | 6 | – | – | – | – | – | – | 5 | 6 | 26 | 8 | 31 | 10 | | | | | | | |
| 6 | 20 | 62 | 8 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 24 | 7 | 26 | 9 | | | | | | | |
| 7 | 5 | 62 | 8 | 3 | – | – | – | – | – | – | 1 | 3 | 32 | 3 | 33 | 4 | | | | | | | |
| 7 | 19 | 62 | 8 | 7 | 0 | 0 | 0 | 1 | 0 | 0 | 16 | 5 | 45 | 7 | 61 | 9 | | | | | | | |
| 8 | 1 | 62 | 8 | 22 | – | – | – | – | – | – | 1 | 5 | 71 | 7 | 72 | 9 | | | | | | | |
| 8 | 15 | 62 | 8 | 30 | – | – | – | – | – | – | 4 | 5 | 24 | 6 | 28 | 7 | | | | | | | |
| 8 | 29 | 62 | 9 | 17 | 0 | 1 | 0 | 1 | 0 | 1 | 9 | 7 | 26 | 8 | 35 | 11 | | | | | | | |
| 9 | 12 | 62 | 10 | 8 | – | – | – | – | – | – | 3 | 6 | 9 | 7 | 12 | 9 | | | | | | | |
| 9 | 20 | 62 | 10 | 24 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 6 | 17 | 7 | 20 | 9 | | | | | | | |

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**MAJOR BASIN** TENNESSEE RIVER

**MINOR BASIN** TENN. RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** TENNESSEE RIVER AT
BRIDGEPORT, ALABAMA

77

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 12 | 61 | 10 | 20 | 5325 | 171 | 48 | 123 | 1 | 13 | 17 | 2 | 1 | 13 | 1 | 5 | 4 | 1 | 7 |
| 11 | 9 | 61 | 11 | 17 | 5010 | 139 | 51 | 88 | 1 | 12 | 15 | 1 | 1 | 12 | 1 | 6 | 5 | 1 | 11 |
| 11 | 17 | 61 | 11 | 26 | 5700 | 162 | 43 | 119 | 1 | 10 | 14 | 1 | 1 | 11 | 1 | 5 | 3 | 1 | 9 |
| 12 | 12 | 61 | 12 | 20 | 5246 | 122 | 55 | 67 | 1 | 13 | 15 | 2 | 1 | 11 | 1 | 7 | 5 | 1 | 13 |
| 12 | 20 | 61 | 12 | 28 | 5159 | 133 | 40 | 93 | 2 | 13 | 11 | 1 | 1 | 8 | 1 | 4 | 3 | 0 | 7 |
| 2 | 1 | 62 | 2 | 9 | 5060 | 91 | 22 | 69 | 1 | 6 | 7 | 1 | 1 | 5 | 0 | 2 | 1 | 1 | 4 |
| 2 | 9 | 62 | 2 | 17 | 5045 | 120 | 35 | 85 | 2 | 10 | 10 | 1 | 1 | 7 | 1 | 4 | 2 | 0 | 7 |
| 3 | 1 | 62 | 3 | 9 | 5045 | 86 | 29 | 57 | 1 | 8 | 8 | 1 | 1 | 6 | 0 | 4 | 2 | 1 | 5 |
| 3 | 16 | 62 | 3 | 28 | * | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 12 | 62 | 4 | 20 | 5065 | 97 | 38 | 59 | 2 | 10 | 11 | 2 | 1 | 8 | 0 | 4 | 3 | 1 | 7 |
| 4 | 26 | 62 | 5 | 7 | 5795 | 110 | 48 | 62 | 2 | 14 | 12 | 2 | 1 | 9 | 0 | 5 | 5 | 1 | 9 |
| 6 | 7 | 62 | 6 | 16 | 5190 | 114 | 51 | 63 | 1 | 12 | 16 | 1 | 1 | 12 | 2 | 6 | 5 | 0 | 11 |
| 7 | 6 | 62 | 7 | 14 | 5050 | 103 | 54 | 49 | 1 | 16 | 16 | 2 | 1 | 12 | 1 | 6 | 5 | 1 | 9 |
| 8 | 2 | 62 | 8 | 10 | 5030 | 124 | 53 | 71 | 1 | 13 | 15 | 3 | 1 | 10 | 1 | 6 | 4 | 1 | 13 |
| 8 | 30 | 62 | 9 | 7 | 5000 | 88 | 31 | 57 | 0 | 7 | 13 | 2 | 1 | 9 | 1 | 4 | 2 | 1 | 4 |

* FLOW DATA UNKNOWN

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** ALABAMA

**MAJOR BASIN** TENNESSEE RIVER

**MINOR BASIN** TENN. RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** TENNESSEE RIVER AT

BRIDGEPORT, ALABAMA 77

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 11 | 61 | 19.3 | 6.4 | 7.5 | 1.4 | 11 | 1.5 | 3.1 | .0 | 18 | 49 | 70 | 5 | 10 | 17 | - | 122 | 1800 |
| 10 | 25 | 61 | 17.6 | 7.2 | 7.2 | 3.4 | 19 | 1.5 | 3.0 | .0 | 17 | 50 | 73 | 10 | 9 | 20 | - | 100 | 5000 |
| 11 | 8 | 61 | 15.3 | 7.8 | 7.2 | .9 | 23 | 1.6 | 3.6 | .0 | 19 | 50 | 76 | 10 | 10 | 14 | - | 134 | - |
| 11 | 22 | 61 | 12.9 | - | 7.5 | 1.4 | 31 | 1.8 | 3.8 | .0 | 21 | 53 | 83 | 10 | 9 | 15 | .1 | 140 | 4300 |
| 12 | 6 | 61 | 11.6 | 8.7 | 7.3 | 1.6 | 21 | 1.4 | 3.0 | .0 | 23 | 51 | 74 | 10 | 11 | 18 | .1 | 118 | - |
| 12 | 21 | 61 | 9.6 | 10.2 | 7.2 | 2.9 | 26 | 2.2 | 6.0 | .0 | 8 | 32 | 43 | 10 | 90 | 10 | - | 72 | 3500 |
| 1 | 3 | 62 | 6.8 | 11.7 | 7.3 | 1.2 | 18 | 1.7 | 4.1 | .0 | 14 | 43 | 63 | 15 | 30 | 17 | - | 110 | 2800 |
| 1 | 17 | 62 | 4.8 | 11.1 | 7.5 | 1.9 | 18 | 2.8 | - | .0 | 12 | 34 | 58 | 10 | 17 | 17 | - | 98 | - |
| 1 | 31 | 62 | 8.6 | 11.6 | 7.2 | 1.1 | 22 | 2.0 | 3.8 | .0 | 9 | 37 | 48 | 5 | 29 | 13 | - | 103 | 2500 |
| 2 | 5 | 62 | - | - | - | - | - | - | - | - | 5 | - | - | - | - | 13 | - | - | - |
| 2 | 14 | 62 | 9.8 | 11.0 | 7.2 | .3 | 21 | 2.0 | 3.5 | .0 | 14 | 35 | 73 | 5 | 28 | 15 | - | 86 | *330 |
| 2 | 28 | 62 | 11.4 | 10.9 | 7.3 | .7 | 20 | 1.7 | 3.6 | .0 | 6 | 39 | 51 | 5 | 48 | 16 | - | 87 | 6000 |
| 3 | 14 | 62 | 8.4 | 11.8 | 7.3 | - | 25 | 1.7 | 3.6 | .0 | 5 | 38 | 60 | 10 | 26 | 21 | - | 90 | 1900 |
| 3 | 28 | 62 | 11.3 | 9.9 | 7.2 | 1.9 | 20 | 1.2 | 2.7 | .0 | 6 | 52 | 64 | 15 | 30 | 18 | - | 87 | 1700 |
| 4 | 11 | 62 | - | 8.8 | 7.4 | 1.1 | 15 | 1.4 | 2.6 | .0 | 5 | 48 | 58 | 10 | 27 | 16 | - | 84 | *330 |
| 4 | 25 | 62 | 15.1 | 9.0 | 7.2 | 1.2 | 17 | 1.3 | 2.5 | .0 | 5 | 41 | 50 | 5 | 19 | 16 | - | 76 | 1300 |
| 5 | 9 | 62 | 20.3 | 9.8 | 7.4 | 1.4 | 17 | 1.3 | 3.4 | .0 | 6 | 50 | 56 | 5 | 18 | 13 | - | 76 | 2800 |
| 5 | 23 | 62 | 23.9 | 6.1 | 7.4 | .8 | 19 | 1.6 | 3.3 | .0 | 4 | 52 | 64 | 5 | 17 | 15 | - | 78 | 1800 |
| 6 | 6 | 62 | 23.6 | 4.6 | 7.3 | 2.0 | 6 | 1.4 | 2.5 | .0 | 6 | 51 | 60 | 5 | 14 | 14 | - | 82 | 4200 |
| 6 | 20 | 62 | 24.8 | 5.4 | 7.4 | 1.1 | 9 | 1.6 | 2.9 | .0 | 9 | 53 | 65 | 5 | 10 | 16 | - | 70 | 1600 |
| 7 | 5 | 62 | 25.5 | 5.2 | 7.4 | .8 | 11 | 1.3 | 2.3 | .0 | 10 | 55 | 68 | 10 | 11 | 16 | - | 92 | 840 |
| 7 | 19 | 62 | 27.0 | 4.8 | 7.5 | .7 | 9 | 1.1 | 2.5 | .0 | 11 | 52 | 61 | 5 | 25 | 21 | - | 94 | 4500 |
| 8 | 1 | 62 | 25.5 | 4.6 | 8.0 | - | 12 | 1.6 | 2.9 | .0 | 8 | 56 | 72 | 5 | *25 | 16 | - | 100 | 3800 |
| 8 | 15 | 62 | 26.4 | 5.0 | 7.4 | .6 | 8 | 1.2 | 2.7 | .0 | 15 | 52 | 74 | 5 | 13 | 14 | - | 100 | 2600 |
| 8 | 29 | 62 | 25.9 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 20 |
| 9 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 600 |
| 9 | 20 | 62 | - | - | 8.0 | - | - | - | - | - | 19 | 56 | 112 | 0 | *25 | 23 | .0 | - | - |
| 9 | 26 | 62 | 22.2 | 5.7 | 7.6 | .7 | 10 | 1.6 | 3.2 | .0 | 21 | 59 | 77 | 0 | 9 | 17 | - | 144 | 4600 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Hales Bar near Chattanooga, Tennessee
Operated by U.S. Geological Survey

MAJOR BASIN Tennessee River

MINOR BASIN Tennessee River-Main Stem & Minor Trib.

STATION LOCATION Tennessee River at
Bridgeport, Alabama

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 22.300 | 33.800 | 25.500 | 49.500 | 128.000 | 167.000 | 36.100 | 40.000 | 25.900 | 31.700 | 30.100 | 28.000 |
| 2 | 29.500 | 37.300 | 34.100 | 48.300 | 103.000 | 149.000 | 39.400 | 35.300 | 28.500 | 28.300 | 31.200 | 16.100 |
| 3 | 38.300 | 42.000 | 23.600 | 44.800 | 81.200 | 137.000 | 33.700 | 36.700 | 27.800 | 29.900 | 30.300 | 23.300 |
| 4 | 40.900 | 37.000 | 27.200 | 48.900 | 78.800 | 134.000 | 22.500 | 30.700 | 29.100 | 31.400 | 32.800 | 28.200 |
| 5 | 40.900 | 13.600 | 35.800 | 52.500 | 77.400 | 125.000 | 24.900 | 30.900 | 29.100 | 34.700 | 26.100 | 26.300 |
| 6 | 41.100 | 32.300 | 38.100 | 60.200 | 71.400 | 115.000 | 31.700 | 31.200 | 28.700 | 34.500 | 30.300 | 26.900 |
| 7 | 29.000 | 40.100 | 36.400 | 72.800 | 53.000 | 103.000 | 32.900 | 35.400 | 28.500 | 35.300 | 30.400 | 27.900 |
| 8 | 22.000 | 37.500 | 37.100 | 65.000 | 54.000 | 92.800 | 18.400 | 38.800 | 28.400 | 24.400 | 31.800 | 27.200 |
| 9 | 26.400 | 39.700 | 32.000 | 59.700 | 56.800 | 86.400 | 31.900 | 39.200 | 28.900 | 29.700 | 35.400 | 21.300 |
| 10 | 37.800 | 38.700 | 31.200 | 51.700 | 60.200 | 96.600 | 33.400 | 41.100 | 29.600 | 35.600 | 31.100 | 30.400 |
| 11 | 39.900 | 29.200 | 56.200 | 52.800 | 55.900 | 94.400 | 36.900 | 40.400 | 29.300 | 36.000 | 29.600 | 27.900 |
| 12 | 29.200 | 24.000 | 108.000 | 54.100 | 51.700 | 98.700 | 71.500 | 33.100 | 29.700 | 35.800 | 15.200 | 27.300 |
| 13 | 32.300 | 25.400 | 152.000 | 52.200 | 51.700 | 90.300 | 103.000 | 21.100 | 29.800 | 38.100 | 32.400 | 26.800 |
| 14 | 30.900 | 30.700 | 129.000 | 42.600 | 44.800 | 87.200 | 79.000 | 27.600 | 30.000 | 38.600 | 29.100 | 25.400 |
| 15 | 29.900 | 33.100 | 71.100 | 43.800 | 44.500 | 81.700 | 52.800 | 35.200 | 29.400 | 27.800 | 25.800 | 25.500 |
| 16 | 39.900 | 33.400 | 42.800 | 46.200 | 45.000 | 73.400 | 54.200 | 34.200 | 29.500 | 38.300 | 34.800 | 21.900 |
| 17 | 31.700 | 30.100 | 104.000 | 43.800 | 44.600 | 69.800 | 65.300 | 39.100 | 29.500 | 35.200 | 37.000 | 26.900 |
| 18 | 35.200 | 29.700 | 169.000 | 38.800 | 44.000 | 69.100 | 49.600 | 38.000 | 29.400 | 33.300 | 24.800 | 24.800 |
| 19 | 35.100 | 32.500 | 183.000 | 43.000 | 44.200 | 61.600 | 42.900 | 31.900 | 29.600 | 33.100 | 13.800 | 23.600 |
| 20 | 40.600 | 32.600 | 178.000 | 45.700 | 43.000 | 49.200 | 42.800 | 18.500 | 29.700 | 23.400 | 21.200 | 24.700 |
| 21 | 40.700 | 32.600 | 142.000 | 41.900 | 41.100 | 58.400 | 44.800 | 28.100 | 30.200 | 36.100 | 24.100 | 28.500 |
| 22 | 32.300 | 32.600 | 111.000 | 45.000 | 59.400 | 83.300 | 42.100 | 27.500 | 29.400 | 29.700 | 30.000 | 32.500 |
| 23 | 34.600 | 32.000 | 95.700 | 55.000 | 117.000 | 83.100 | 40.000 | 26.900 | 29.800 | 33.100 | 37.500 | 17.500 |
| 24 | 34.100 | 29.800 | 84.800 | 78.800 | 178.000 | 69.900 | 39.000 | 28.000 | 29.700 | 32.800 | 31.600 | 27.100 |
| 25 | 35.500 | 30.300 | 84.500 | 105.000 | 181.000 | 61.300 | 39.000 | 28.800 | 27.800 | 29.400 | 20.900 | 23.400 |
| 26 | 36.000 | 21.600 | 83.300 | 118.000 | 178.000 | 44.600 | 40.600 | 28.500 | 28.800 | 32.500 | 15.200 | 21.800 |
| 27 | 41.800 | 29.200 | 78.000 | 144.000 | 176.000 | 44.400 | 39.900 | 26.200 | 29.000 | 34.400 | 26.300 | 23.600 |
| 28 | 43.600 | 35.700 | 76.000 | 165.000 | 175.000 | 44.200 | 40.100 | 28.600 | 29.200 | 32.000 | 27.600 | 27.000 |
| 29 | 15.800 | 35.600 | 78.500 | 175.000 |  | 41.800 | 34.700 | 28.500 | 28.900 | 22.600 | 26.300 | 27.600 |
| 30 | 38.700 | 29.000 | 74.400 | 167.000 |  | 38.200 | 39.200 | 28.500 | 32.200 | 29.300 | 28.700 | 19.800 |
| 31 | 32.700 |  | 65.300 | 153.000 |  | 37.500 |  | 29.100 |  | 31.500 | 28.600 |  |

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 400 | 0 | 0 | 80 | 0 | 20 | 20 | 190 | 60 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 200 | 0 | 0 | 0 | 0 | 40 | 0 | 170 | 20 | 20 | 0 | | | | | | | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 20 | 100 | 0 | 80 | 20 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 200 | 0 | 0 | 20 | 0 | 20 | 0 | 100 | 60 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 100 | 0 | 0 | 0 | 0 | 40 | 0 | 80 | 20 | 20 | 20 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 40 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 700 | 0 | 0 | 20 | 0 | 50 | 70 | 140 | 470 | 20 | 160 | 88 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 50 | 70 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 70 | 110 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 600 | 60 | 0 | 20 | 0 | 120 | 60 | 250 | 120 | 20 | 60 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 100 | 0 | 0 | 0 | 20 | 0 | 0 | 20 | 110 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 500 | 60 | 0 | 20 | 0 | 40 | 40 | 230 | 60 | 40 | 20 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 500 | 20 | 0 | 0 | 0 | 80 | 0 | 80 | 270 | 0 | 100 | | | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 800 | 150 | 0 | 150 | 0 | 20 | 20 | 270 | 170 | 190 | 130 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 1000 | 0 | 40 | 60 | 0 | 20 | 230 | 650 | 20 | 420 | 190 | 71 | 2 | 69 | 1 | 60 | 1 | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 700 | 20 | 0 | 20 | 0 | 80 | 20 | 390 | 210 | 0 | 0 | 69 | 2 | | | | | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 500 | 0 | 0 | 0 | 0 | 150 | 0 | 130 | 250 | 130 | 40 | | | | | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 500 | 0 | 0 | 40 | 0 | 80 | 20 | 270 | 80 | 60 | 40 | 69 | 1 | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 1000 | 40 | 0 | 80 | 0 | 100 | 40 | 210 | 480 | 40 | 150 | 92 | 1 | 84 | 1 | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 600 | 0 | 0 | 140 | 0 | 60 | 0 | 250 | 120 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 8 | 6 | 62 | 1300 | 0 | 0 | 130 | 0 | 40 | 0 | 510 | 630 | 40 | 210 | 68 | 2 | 73 | 1 | 69 | 1 | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 500 | 60 | 0 | 40 | 0 | 40 | 80 | 120 | 120 | 40 | 0 | | | | | | | | | | | | | | | | | | | | |
| 9 | 6 | 62 | 3100 | 0 | 620 | 1160 | 0 | 270 | 0 | 210 | 830 | 0 | 40 | 25 | 3 | 17 | 3 | 2 | 1 | 38 | 1 | 51 | 1 | 92 | 1 | | | | | | | | |
| 9 | 17 | 62 | 400 | 10 | 80 | 200 | 0 | 10 | 0 | 60 | 70 | 140 | 80 | | | | | | | | | | | | | | | | | | | | |

## PLANKTON POPULATION

**MAJOR BASIN** TENNESSEE RIVER

**MINOR BASIN** TENN. RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** TENNESSEE RIVER AT

CHATTANOOGA, TENNESSEE 051

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | OTHER SPECIES PERCENT | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 56 | 28 | 58 | 13 | 57 | 11 | 23 | 8 | 40 | 0 | 10 | 12 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 56 | 32 | 58 | 12 | 57 | 10 | 82 | 6 | 40 | 0 | 0 | 7 | 11 | 2 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 56 | 34 | 57 | 13 | 82 | 9 | 58 | 8 | 36 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 80 | 23 | 56 | 22 | 57 | 15 | 58 | 6 | 34 | 20 | 0 | 5 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 56 | 23 | 62 | 11 | 83 | 9 | 16 | 6 | 51 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 57 | 14 | 27 | 14 | 71 | 9 | 56 | 9 | 54 | 70 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 57 | 26 | 83 | 10 | 82 | 6 | 56 | 6 | 52 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 2 | 0 |
| 2 | 5 | 62 | 61 | 16 | 57 | 14 | 56 | 9 | 58 | 7 | 54 | 20 | 10 | 6 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 57 | 12 | 92 | 8 | 58 | 7 | 65 | 6 | 67 | 40 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 3 | 5 | 62 | 62 | 11 | 61 | 8 | 71 | 6 | 27 | 5 | 70 | 0 | 10 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 3 | 19 | 62 | 61 | 15 | 56 | 9 | 57 | 7 | 58 | 7 | 62 | 40 | 10 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 61 | 31 | 62 | 14 | 92 | 13 | 56 | 8 | 34 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 2 |
| 4 | 16 | 62 | 61 | 75 | 56 | 4 | 92 | 4 | 86 | 2 | 15 | 20 | 0 | 3 | | | | | | | | | | | 1 | | | | | | | 1 | 0 |
| 5 | 7 | 62 | 61 | 63 | 56 | 22 | 57 | 6 | 58 | 4 | 5 | 0 | 0 | 14 | 11 | 1 | | | | | | | | | 10 | 51 | 2 | 50 | 1 | | | 0 | 0 |
| 5 | 21 | 62 | 58 | 30 | 56 | 23 | 61 | 23 | 47 | 10 | 14 | 0 | 0 | 5 | | | | | | | | | | | 2 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 47 | 28 | 56 | 24 | 58 | 16 | 61 | 9 | 23 | 0 | 10 | 16 | 11 | 1 | | | | | | | | | 4 | 51 | 1 | | | | | 0 | 0 |
| 6 | 18 | 62 | 56 | 54 | 58 | 13 | 92 | 8 | 47 | 8 | 17 | 0 | 0 | 10 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 56 | 36 | 92 | 20 | 47 | 14 | 58 | 8 | 22 | 20 | 0 | 6 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 56 | 40 | 58 | 10 | 92 | 8 | 57 | 6 | 36 | 0 | 0 | 12 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 27 | 68 | 28 | 9 | 58 | 5 | 1 | 3 | 15 | 0 | 0 | 115 | 11 | 4 | 17 | 2 | 22 | 2 | 16 | 1 | 7 | 1 | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 2 | 14 | 57 | 12 | 91 | 11 | 58 | 8 | 55 | 0 | 0 | 96 | 11 | 3 | 17 | 3 | 22 | 2 | 15 | 1 | 16 | 1 | 3 | 50 | 1 | | | | | 0 | 1 |
| 9 | 17 | 62 | 56 | 30 | 57 | 15 | 58 | 8 | 92 | 6 | 41 | 0 | 0 | 160 | 17 | 4 | 11 | 4 | 18 | 2 | 22 | 2 | 16 | 1 | 3 | 50 | 1 | | | | | 0 | 0 |
| 9 | 6 | 62 | 56 | 26 | 57 | 12 | 2 | 11 | 58 | 8 | 43 | 0 | 0 | 258 | 11 | 5 | 17 | 5 | 15 | 2 | 18 | 2 | 22 | 2 | 0 | | | | | | | 0 | 0 |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 4 | 61 | 10 | 14 | - | - | - | - | - | - | 2 | 5 | 17 | 7 | 19 | 9 | | | | | | |
| 10 | 18 | 61 | 10 | 31 | - | - | - | - | - | - | 3 | 5 | 11 | 6 | 14 | 8 | | | | | | |
| 11 | 1 | 61 | 11 | 13 | - | - | - | - | - | - | 5 | 5 | 15 | 6 | 20 | 8 | | | | | | |
| 11 | 15 | 61 | 11 | 28 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 5 | 14 | 6 | 15 | 8 | | | | | | |
| 11 | 29 | 61 | 12 | 7 | 0 | 1 | 0 | 1 | 0 | 1 | 11 | 5 | 64 | 7 | 75 | 9 | | | | | | |
| 12 | 13 | 61 | 12 | 20 | 4 | 2 | 0 | 1 | 4 | 2 | 93 | 7 | 53 | 5 | 146 | 9 | | | | | | |
| 12 | 27 | 61 | 1 | 5 | - | - | - | - | - | - | 15 | 6 | 54 | 6 | 69 | 8 | | | | | | |
| 1 | 10 | 62 | 1 | 22 | 0 | 0 | 0 | 1 | 0 | 1 | 24 | 4 | 53 | 5 | 77 | 8 | | | | | | |
| 1 | 24 | 62 | 2 | 5 | - | - | - | - | - | - | 23 | 6 | 49 | 6 | 72 | 8 | | | | | | |
| 2 | 7 | 62 | 2 | 15 | - | - | - | - | - | - | 26 | 5 | 37 | 6 | 63 | 8 | | | | | | |
| 2 | 21 | 62 | 3 | 5 | 1 | 1 | 0 | 1 | 1 | 1 | 31 | 4 | 59 | 5 | 90 | 6 | | | | | | |
| 3 | 7 | 62 | 3 | 15 | - | - | - | - | - | - | 14 | 6 | 24 | 6 | 38 | 8 | | | | | | |
| 3 | 21 | 62 | 4 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 19 | 4 | 36 | 5 | 55 | 6 | | | | | | |
| 4 | 4 | 62 | 4 | 19 | - | - | - | - | - | - | 21 | 4 | 43 | 5 | 64 | 6 | | | | | | |
| 4 | 18 | 62 | 4 | 30 | 1 | 1 | 0 | 1 | 1 | 1 | 28 | 5 | 71 | 6 | 99 | 7 | | | | | | |
| 5 | 2 | 62 | 6 | 1 | - | - | - | - | - | - | 11 | 8 | 12 | 7 | 23 | 11 | | | | | | |
| 5 | 16 | 62 | 6 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 30 | 7 | 30 | 9 | | | | | | |
| 6 | 13 | 62 | 7 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 18 | 6 | 18 | 7 | | | | | | |
| 6 | 27 | 62 | 7 | 24 | - | - | - | - | - | - | 28 | 6 | 4 | 5 | 32 | 7 | | | | | | |
| 7 | 11 | 62 | 8 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 33 | 3 | 33 | 4 | | | | | | |
| 7 | 25 | 62 | 8 | 21 | - | - | - | - | - | - | 4 | 5 | 53 | 6 | 57 | 7 | | | | | | |
| 8 | 8 | 62 | 8 | 27 | - | - | - | - | - | - | 3 | 3 | 33 | 3 | 36 | 4 | | | | | | |
| 8 | 22 | 62 | 9 | 6 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 6 | 29 | 8 | 33 | 10 | | | | | | |
| 9 | 5 | 62 | 9 | 23 | - | - | - | - | - | - | 1 | 6 | 14 | 7 | 15 | 9 | | | | | | |
| 9 | 19 | 62 | 10 | 10 | 0 | 0 | 1 | 1 | 1 | 1 | 9 | 5 | 27 | 6 | 36 | 7 | | | | | | |

**STATION LOCATION** TENNESSEE RIVER AT

CHATTANOOGA, TENNESSEE

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 11 | 61 | 10 | 18 | 3960 | 164 | 38 | 126 | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 8 | 61 | 11 | 15 | 4400 | 143 | 44 | 99 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 13 | 61 | 12 | 20 | 3150 | 205 | 64 | 141 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 13 | 61 | | * | 11510 | 167 | 47 | 120 | 2 | 14 | 12 | 1 | 1 | 10 | 0 | 5 | 3 | 1 | 10 |
| 1 | 19 | 62 | 1 | 26 | 3050 | 167 | 57 | 110 | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 14 | 62 | 2 | 21 | 3110 | 186 | 47 | 139 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 14 | 62 | 3 | 21 | 3080 | 154 | 35 | 119 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 14 | 62 | | * | 9240 | 170 | 47 | 123 | 3 | 11 | 15 | 2 | 1 | 12 | 0 | 6 | 3 | 1 | 8 |
| 4 | 11 | 62 | 4 | 18 | 3570 | 112 | 45 | 67 | - | - | - | - | - | - | - | - | - | - | - |
| 5 | 9 | 62 | 5 | 16 | 3360 | 147 | 77 | 70 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 13 | 62 | 6 | 20 | 4190 | 124 | 57 | 67 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 13 | 62 | | * | 11120 | 127 | 59 | 68 | 2 | 16 | 15 | 2 | 1 | 11 | 1 | 6 | 5 | 1 | 14 |
| 7 | 12 | 62 | 7 | 18 | 4360 | 142 | 53 | 89 | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 8 | 62 | 8 | 15 | 4580 | 114 | 40 | 74 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 12 | 62 | 9 | 19 | 4740 | 126 | 45 | 81 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 12 | 62 | | * | 13680 | 127 | 46 | 81 | 1 | 13 | 13 | 1 | 1 | 10 | 1 | 6 | 5 | 0 | 8 |

## NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** TENNESSEE

**MAJOR BASIN** TENNESSEE RIVER

**MINOR BASIN** TENN. RIVER-MAIN STEM + MINOR TRIB.

**STATION LOCATION** TENNESSEE RIVER AT

CHATTANOOGA, TENNESSEE

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 3 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1200 |
| 10 | 4 | 61 | 21.3 | 6.6 | 7.4 | 1.3 | 22 | 1.1 | 3.1 | .0 | 17 | 50 | 72 | 3 | 12 | 17 | - | 123 | - |
| 10 | 18 | 61 | 19.6 | 7.4 | 7.4 | 3.1 | 27 | 1.3 | - | .0 | 16 | 41 | 70 | 4 | 10 | 18 | - | 113 | - |
| 10 | 31 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2000 |
| 11 | 1 | 61 | 17.4 | 7.5 | 7.4 | 2.1 | 21 | 1.5 | 2.5 | .0 | 16 | 44 | 72 | 5 | 10 | 17 | - | 115 | - |
| 11 | 14 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2300 |
| 11 | 15 | 61 | 16.2 | - | 7.4 | - | - | - | - | - | 17 | 50 | 76 | 5 | 10 | 21 | .2 | 113 | - |
| 11 | 28 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1900 |
| 11 | 29 | 61 | 12.3 | 8.7 | 7.4 | 1.1 | 22 | 1.4 | 3.3 | .0 | 20 | 50 | 78 | 5 | 15 | 21 | - | 115 | - |
| 12 | 6 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1000 |
| 12 | 12 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 52000 |
| 12 | 13 | 61 | 11.2 | 9.0 | 7.2 | 4.1 | 29 | 2.6 | 7.0 | .0 | 12 | 34 | 52 | 15 | 131 | 12 | .2 | 85 | - |
| 12 | 26 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *100 |
| 12 | 27 | 61 | 8.4 | 10.4 | 7.1 | 1.8 | 21 | 2.0 | 5.4 | .0 | 4 | 34 | 46 | 8 | 61 | 13 | - | 102 | - |
| 1 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 240000 |
| 1 | 10 | 62 | 5.6 | - | 7.3 | - | - | - | - | - | 9 | 42 | 60 | 7 | 38 | - | - | - | - |
| 1 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 32000 |
| 1 | 24 | 62 | 6.7 | 10.9 | 7.4 | 1.2 | 23 | 1.6 | 3.6 | .0 | 7 | 48 | 68 | 9 | 43 | 15 | .0 | 107 | - |
| 2 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 9700 |
| 2 | 7 | 62 | 7.8 | 10.5 | 7.3 | 1.3 | 21 | 1.1 | 1.6 | .0 | 7 | 50 | 68 | 6 | 32 | 28 | - | 98 | - |
| 2 | 10 | 62 | - | 11.0 | - | 1.9 | 20 | 2.4 | 4.4 | .0 | 9 | - | - | - | - | 11 | - | 102 | - |
| 2 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3200 |
| 2 | 21 | 62 | 9.5 | 10.1 | 7.4 | 3.5 | 19 | 1.5 | 3.7 | .0 | 6 | 52 | 72 | 5 | 21 | 18 | .0 | 102 | - |
| 3 | 6 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 460 |
| 3 | 7 | 62 | 8.9 | 10.7 | 7.3 | .6 | 12 | 1.2 | 2.9 | .0 | 5 | 42 | 60 | 6 | 23 | 15 | - | 91 | - |
| 3 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1600 |
| 3 | 21 | 62 | 10.6 | 10.2 | 7.3 | .9 | 19 | 1.1 | 2.8 | .0 | 7 | 55 | 72 | 4 | 30 | 19 | - | 113 | - |
| 3 | 21 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 12 | .0 | 96 | - |
| 4 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4800 |
| 4 | 4 | 62 | 12.3 | 9.4 | 7.3 | 2.0 | 18 | 1.4 | 3.0 | .0 | 4 | 53 | 76 | 3 | 26 | 12 | - | 86 | - |
| 4 | 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 24000 |
| 4 | 18 | 62 | 12.9 | 9.5 | 7.3 | 1.5 | 22 | 1.0 | 2.8 | .0 | 3 | 41 | 60 | 7 | 24 | 17 | - | - | - |
| 5 | 1 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1600 |
| 5 | 2 | 62 | 20.2 | 8.2 | 7.4 | 1.2 | 18 | 1.2 | 3.0 | .0 | 2 | 41 | 54 | 9 | 15 | 13 | .0 | 80 | - |
| 5 | 15 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1300 |
| 5 | 16 | 62 | 21.3 | 7.1 | 7.4 | 5.0 | 24 | 1.2 | 2.8 | .0 | 1 | 47 | 58 | 5 | 15 | 14 | .0 | 91 | - |
| 5 | 31 | 62 | - | 5.4 | - | 1.0 | 9 | 1.5 | 3.2 | .0 | 3 | - | - | - | - | 14 | - | 90 | - |
| 6 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2800 |
| 6 | 13 | 62 | 24.8 | 4.9 | 7.3 | 1.3 | 15 | 1.5 | 3.0 | .0 | 7 | 55 | 74 | 5 | 36 | 16 | - | 98 | - |

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** TENNESSEE RIVER

**MINOR BASIN** TENN. RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** TENNESSEE RIVER AT
CHATTANOOGA, TENNESSEE 51

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 6 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 400 |
| 6 | 27 | 62 | - | 5.2 | - | .8 | 11 | 1.1 | 2.8 | .0 | 5 | - | - | - | - | 15 | .0 | 109 | - |
| 6 | 28 | 62 | 24.8 | - | 7.4 | - | - | - | - | - | 5 | 54 | 74 | 5 | 17 | - | .0 | - | - |
| 7 | 10 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 4100 |
| 7 | 11 | 62 | 25.2 | 5.1 | 7.4 | 1.4 | 14 | 1.2 | 2.4 | .0 | 7 | 47 | 70 | 5 | 34 | 15 | - | 96 | - |
| 7 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 600 |
| 7 | 25 | 62 | 26.3 | 4.8 | 7.4 | 1.6 | 12 | 1.5 | 2.9 | .0 | 7 | 53 | 70 | 5 | 17 | 24 | - | 102 | - |
| 8 | 5 | 62 | 26.9 | - | 7.4 | - | - | - | - | - | 13 | 52 | 74 | 5 | 20 | - | - | - | - |
| 8 | 8 | 62 | 26.9 | 5.2 | 7.4 | 1.0 | 9 | 1.2 | 3.3 | .0 | 10 | 56 | 76 | 5 | 25 | 14 | - | 116 | 400 |
| 8 | 21 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 500 |
| 8 | 22 | 62 | 26.3 | 4.3 | 7.4 | .8 | 8 | 1.1 | 2.9 | .0 | 11 | 51 | 76 | 5 | 16 | 15 | - | 117 | - |
| 9 | 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 9 | 5 | 62 | - | 5.8 | - | 1.1 | 12 | 1.4 | 3.8 | .0 | 13 | - | - | - | - | 16 | - | 131 | - |
| 9 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 500 |
| 9 | 19 | 62 | 25.2 | 6.6 | 7.5 | 2.3 | 11 | 1.6 | 4.1 | .0 | 16 | 52 | 78 | 5 | 20 | 15 | - | 142 | - |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Chattanooga, Tennessee
Operated by U.S. Geological Survey

MAJOR BASIN Tennessee River

MINOR BASIN Tennessee River-Main Stem & Minor Trib.

STATION LOCATION Tennessee River at
Chattanooga, Tennessee

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 21.900 | 33.700 | 24.800 | 47.900 | 116.000 | 153.000 | 28.900 | 40.000 | 28.000 | 29.100 | 29.500 | 28.000 |
| 2 | 28.100 | 36.400 | 34.000 | 44.800 | 98.300 | 137.000 | 34.700 | 35.600 | 28.700 | 29.100 | 32.900 | 16.100 |
| 3 | 37.900 | 42.200 | 23.500 | 43.800 | 80.600 | 132.000 | 27.500 | 37.100 | 27.900 | 30.500 | 30.900 | 23.300 |
| 4 | 38.900 | 35.400 | 27.100 | 48.400 | 79.200 | 127.000 | 17.500 | 29.000 | 28.300 | 30.600 | 32.600 | 28.200 |
| 5 | 40.800 | 10.400 | 35.700 | 50.300 | 79.100 | 123.000 | 24.500 | 32.000 | 28.700 | 35.800 | 22.600 | 27.000 |
| 6 | 41.100 | 33.300 | 38.000 | 59.900 | 66.400 | 106.000 | 26.500 | 30.000 | 28.700 | 38.900 | 30.500 | 29.400 |
| 7 | 29.000 | 40.400 | 36.300 | 65.600 | 51.700 | 98.700 | 26.500 | 36.800 | 29.100 | 32.400 | 31.500 | 28.400 |
| 8 | 22.000 | 35.400 | 37.000 | 60.100 | 55.000 | 86.100 | 5.000 | 40.100 | 28.600 | 20.700 | 32.500 | 27.400 |
| 9 | 26.400 | 38.700 | 31.900 | 58.400 | 56.500 | 87.400 | 30.000 | 39.200 | 29.600 | 30.100 | 37.400 | 16.000 |
| 10 | 37.800 | 37.700 | 27.700 | 51.400 | 59.100 | 93.700 | 27.000 | 40.900 | 29.600 | 35.600 | 31.700 | 28.200 |
| 11 | 39.900 | 28.100 | 49.900 | 51.200 | 54.600 | 92.100 | 32.500 | 40.200 | 29.300 | 35.100 | 29.500 | 27.800 |
| 12 | 29.200 | 24.200 | 108.000 | 54.200 | 51.700 | 98.800 | 73.500 | 33.200 | 28.600 | 37.400 | 15.100 | 27.300 |
| 13 | 32.300 | 26.200 | 144.000 | 50.500 | 50.200 | 87.400 | 86.500 | 20.800 | 29.700 | 40.800 | 32.300 | 28.400 |
| 14 | 30.900 | 31.300 | 109.000 | 40.900 | 42.500 | 84.700 | 60.500 | 27.400 | 29.600 | 34.600 | 29.000 | 26.800 |
| 15 | 29.900 | 32.100 | 58.000 | 41.400 | 43.100 | 79.000 | 43.500 | 35.000 | 29.100 | 24.000 | 27.100 | 23.500 |
| 16 | 39.900 | 31.200 | 41.100 | 43.000 | 43.800 | 72.100 | 55.000 | 34.000 | 29.700 | 38.200 | 37.600 | 16.500 |
| 17 | 31.700 | 28.700 | 92.800 | 38.900 | 42.700 | 68.100 | 62.500 | 39.000 | 29.300 | 35.100 | 36.900 | 25.800 |
| 18 | 35.200 | 28.600 | 143.000 | 35.100 | 41.600 | 67.300 | 48.500 | 37.900 | 28.800 | 33.200 | 24.700 | 25.900 |
| 19 | 35.100 | 31.000 | 176.000 | 40.300 | 43.300 | 56.900 | 42.000 | 31.800 | 30.200 | 33.000 | 13.700 | 23.800 |
| 20 | 40.600 | 31.500 | 168.000 | 42.200 | 38.300 | 46.700 | 42.000 | 18.400 | 30.100 | 23.300 | 21.100 | 26.700 |
| 21 | 40.700 | 30.900 | 124.000 | 39.300 | 39.000 | 62.100 | 41.500 | 28.000 | 28.700 | 32.000 | 24.000 | 28.600 |
| 22 | 32.300 | 31.800 | 105.000 | 43.300 | 58.400 | 81.900 | 41.500 | 27.400 | 28.800 | 26.900 | 29.900 | 29.000 |
| 23 | 34.600 | 30.600 | 88.800 | 53.600 | 105.000 | 82.200 | 39.500 | 26.800 | 27.500 | 35.300 | 37.400 | 14.000 |
| 24 | 34.100 | 29.700 | 83.500 | 78.300 | 171.000 | 68.300 | 38.500 | 27.900 | 28.000 | 32.800 | 31.500 | 28.100 |
| 25 | 35.500 | 29.000 | 83.600 | 100.000 | 172.000 | 58.200 | 38.500 | 28.700 | 28.600 | 28.700 | 20.800 | 22.000 |
| 26 | 36.000 | 20.900 | 81.200 | 108.000 | 166.000 | 41.000 | 40.000 | 28.400 | 28.000 | 33.200 | 15.100 | 23.300 |
| 27 | 41.800 | 32.300 | 75.700 | 138.000 | 169.000 | 41.300 | 38.000 | 26,100 | 28.700 | 35.600 | 26.300 | 24.800 |
| 28 | 43.600 | 35.100 | 76.500 | 149.000 | 168.000 | 41.600 | 39.000 | 28.500 | 28.800 | 30.000 | 27.600 | 27.500 |
| 29 | 15.800 | 32.500 | 76.300 | 164.000 |  | 39.200 | 33.500 | 28.400 | 29.500 | 19.700 | 26.300 | 26.600 |
| 30 | 38.600 | 27.600 | 73.300 | 160.000 |  | 36.000 | 39.500 | 28.400 | 30.700 | 29.100 | 28.700 | 18.100 |
| 31 | 32.600 |  | 68.900 | 141.000 |  | 30.900 |  | 29.000 |  | 32.100 | 28.600 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

| | |
|---|---|
| **STATE** | TENNESSEE |
| **MAJOR BASIN** | TENNESSEE RIVER |
| **MINOR BASIN** | TENN. RIVER-MAIN STEM & MINOR TRIB. |
| **STATION LOCATION** | TENNESSEE RIVER AT<br>LENOIR CITY, TENNESSEE 10 |

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 1 | 30 | 62 | 2 | 9 | 2 | 1 | 1 | 1 | 3 | 1 | 65 | 6 | 26 | 5 | 91 | 7 | | | | | | |
| 2 | 5 | 62 | 2 | 13 | 1 | 1 | 0 | 1 | 1 | 1 | 31 | 5 | 22 | 5 | 53 | 7 | | | | | | |
| 2 | 12 | 62 | 2 | 20 | 0 | 1 | 0 | 1 | 0 | 1 | 31 | 5 | 21 | 5 | 52 | 7 | | | | | | |
| 2 | 19 | 62 | 2 | 28 | 0 | 1 | 0 | 1 | 0 | 1 | 21 | 4 | 22 | 5 | 43 | 6 | | | | | | |
| 2 | 26 | 62 | 3 | 9 | 2 | 2 | 0 | 0 | 2 | 2 | 84 | 8 | 36 | 5 | 120 | 9 | | | | | | |
| 3 | 5 | 62 | 3 | 16 | 1 | 1 | 0 | 1 | 1 | 1 | 40 | 8 | 18 | 6 | 58 | 10 | | | | | | |
| 3 | 12 | 62 | 3 | 22 | 1 | 1 | 0 | 1 | 1 | 1 | 28 | 5 | 22 | 5 | 50 | 7 | | | | | | |
| 3 | 19 | 62 | 3 | 29 | 0 | 1 | 1 | 1 | 2 | 1 | 14 | 5 | 17 | 5 | 31 | 7 | | | | | | |
| 3 | 26 | 62 | 4 | 5 | 0 | 1 | 0 | 1 | 0 | 1 | 12 | 4 | 25 | 5 | 37 | 6 | | | | | | |
| 4 | 2 | 62 | 4 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 14 | 5 | 23 | 5 | 37 | 7 | | | | | | |
| 4 | 9 | 62 | 4 | 24 | 0 | 1 | 0 | 1 | 0 | 1 | 12 | 4 | 12 | 4 | 24 | 6 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | 0 | 0 | 0 | 1 | 0 | 1 | 13 | 4 | 17 | 5 | 30 | 6 | | | | | | |
| 4 | 30 | 62 | 5 | 31 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 5 | 7 | 6 | 11 | 7 | | | | | | |
| 5 | 7 | 62 | 6 | 8 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 7 | 6 | 7 | 7 | 10 | | | | | | |
| 5 | 14 | 62 | 6 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 13 | 6 | 14 | 8 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 9 | 16 | 9 | 16 | 13 | | | | | | |
| 5 | 28 | 62 | 6 | 28 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 | 10 | 7 | 14 | 9 | | | | | | |
| 6 | 4 | 62 | 7 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 5 | 9 | 6 | 16 | 8 | | | | | | |
| 6 | 18 | 62 | 7 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 11 | 7 | 14 | 9 | | | | | | |
| 6 | 19 | 62 | 7 | 9 | 0 | 1 | 1 | 1 | 1 | 1 | 3 | 5 | 14 | 7 | 17 | 9 | | | | | | |
| 6 | 25 | 62 | 9 | 9 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 4 | 10 | 6 | 11 | 7 | | | | | | |
| 7 | 24 | 62 | 9 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 6 | 7 | 6 | 8 | | | | | | |
| 7 | 30 | 62 | 8 | 21 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 5 | 11 | 6 | 14 | 7 | | | | | | |
| 8 | 6 | 62 | 8 | 23 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 5 | 12 | 7 | 15 | 8 | | | | | | |
| 8 | 14 | 62 | 8 | 30 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 5 | 12 | 7 | 17 | 8 | | | | | | |
| 8 | 20 | 62 | 8 | 31 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 5 | 3 | 7 | 3 | 9 | | | | | | |
| 8 | 27 | 62 | 9 | 30 | 0 | 0 | 0 | 1 | 0 | 1 | 11 | 5 | 7 | 8 | 18 | 9 | | | | | | |
| 9 | 4 | 62 | 9 | 18 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 5 | 14 | 7 | 17 | 9 | | | | | | |
| 9 | 10 | 62 | 9 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 7 | 6 | 8 | 44 | 11 | | | | | | |
| 9 | 17 | 62 | 10 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 5 | 10 | 6 | 12 | 7 | | | | | | |
| 9 | 24 | 62 | 10 | 17 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 6 | 12 | 6 | 18 | 8 | | | | | | |

# PLANKTON POPULATION

**MAJOR BASIN** TENNESSEE RIVER

**MINOR BASIN** TENN. RIVER-MAIN STEM & MINOR TRIB.

**STATION LOCATION** TENNESSEE RIVER AT
LENOIR CITY, TENNESSEE 107

| DATE OF SAMPLE | | | ALGAE (*Number per milliliter*) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (*Pigmented*) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 1 | 30 | 62 | 700 | 0 | 0 | 20 | 0 | 40 | 0 | 370 | 250 | 40 | 270 | | | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 600 | 0 | 0 | 0 | 0 | 120 | 40 | 270 | 150 | 80 | 0 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 700 | 0 | 0 | 0 | 0 | 80 | 0 | 190 | 390 | 100 | 210 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 600 | 0 | 0 | 20 | 0 | 70 | 20 | 480 | 50 | 110 | 230 | 69 | 1 | 71 | 1 | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 800 | 0 | 0 | 0 | 0 | 20 | 40 | 480 | 250 | 80 | 40 | 69 | 2 | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 1100 | 0 | 0 | 160 | 0 | 90 | 470 | 770 | 250 | 500 | 250 | 68 | 2 | 69 | 2 | 60 | 2 | | | | | | | | | | | | | | |
| 5 | 7 | 62 | 800 | 0 | 0 | 40 | 20 | 100 | 0 | 540 | 60 | 190 | 40 | 69 | 2 | | | | | | | | | | | | | | | | | | |
| 5 | 21 | 62 | 700 | 0 | 0 | 60 | 0 | 0 | 20 | 230 | 360 | 680 | 270 | | | | | | | | | | | | | | | | | | | | |
| 6 | 4 | 62 | 1100 | 0 | 0 | 0 | 0 | 0 | 0 | 630 | 420 | 1310 | 720 | 68 | 2 | | | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 1800 | 0 | 0 | 100 | 0 | 100 | 40 | 170 | 1350 | 40 | 150 | 92 | 3 | | | | | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 1000 | 0 | 0 | 40 | 0 | 0 | 40 | 250 | 680 | 250 | 380 | 92 | 1 | 68 | 1 | | | | | | | | | | | | | | | | |
| 7 | 16 | 62 | 1800 | 40 | 340 | 130 | 0 | 40 | 40 | 630 | 590 | 720 | 380 | 17 | 2 | 69 | 1 | 68 | 1 | 92 | 1 | | | | | | | | | | | | |
| 8 | 6 | 62 | 1700 | 0 | 40 | 230 | 0 | 0 | 20 | 840 | 590 | 930 | 550 | 68 | 3 | 73 | 1 | 40 | 1 | 69 | 1 | 92 | 1 | | | | | | | | | | |
| 8 | 20 | 62 | 1000 | 0 | 0 | 130 | 0 | 0 | 0 | 510 | 380 | 130 | 340 | 68 | 1 | | | | | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 1200 | 0 | 250 | 40 | 0 | 20 | 0 | 510 | 420 | 380 | 40 | 68 | 2 | 92 | 1 | | | | | | | | | | | | | | | | |
| 9 | 17 | 62 | 100 | 0 | 0 | 20 | 0 | 70 | 0 | 20 | 20 | 10 | 90 | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE |  |  | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* |  |  |  |  |  |  |  |  | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |  |  |  |  | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS |  |  |  |  |  |  |  |  |  |  | CRUSTACEA |  |  |  |  |  |  | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
|  |  |  | 1ST |  | 2ND |  | 3RD |  | 4TH |  | OTHER SPECIES PERCENT |  |  | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* 1ST |  | 2ND |  | 3RD |  | 4TH |  | 5TH |  | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* 1ST |  | 2ND |  | 3RD |  |  |  |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT |  |  |  |  | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |  | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |  |  |
| 1 | 30 | 62 | 61 | 12 | 36 | 8 | 15 | 8 | 65 | 7 | 65 | 0 | 0 | 4 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 2 | 19 | 62 | 57 | 28 | 82 | 9 | 58 | 9 | 70 | 6 | 48 | 0 | 0 | 2 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 3 | 5 | 62 | 61 | 26 | 62 | 9 | 65 | 8 | 36 | 8 | 49 | 80 | 0 | 3 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 3 | 19 | 62 | 61 | 40 | 57 | 11 | 82 | 8 | 9 | 4 | 37 | 0 | 0 | 3 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 4 | 2 | 62 | 61 | 37 | 57 | 10 | 82 | 7 | 27 | 6 | 40 | 0 | 0 | 1 |  |  |  |  |  |  |  |  |  |  | 0 |  |  |  |  |  |  | 0 | 0 |
| 4 | 16 | 62 | 61 | 74 | 56 | 10 | 31 | 1 | 33 | 1 | 14 | 20 | 0 | 15 | 11 | 1 | 17 | 1 |  |  |  |  |  |  | 8 | 51 | 1 | 50 | 1 |  |  | 0 | 2 |
| 5 | 7 | 62 | 56 | 38 | 57 | 24 | 58 | 13 | 61 | 7 | 10 | 40 | 0 | 14 | 11 | 1 |  |  |  |  |  |  |  |  | 6 | 51 | 1 |  |  |  |  | 0 | 0 |
| 5 | 21 | 62 | 27 | 41 | 58 | 13 | 56 | 13 | 57 | 5 | 28 | 110 | 0 | 10 | 17 | 1 |  |  |  |  |  |  |  |  | 13 | 51 | 2 | 76 | 1 |  |  | 0 | 0 |
| 6 | 4 | 62 | 58 | 16 | 27 | 15 | 56 | 15 | 2 | 7 | 47 | 110 | 0 | 3 |  |  |  |  |  |  |  |  |  |  | 8 | 76 | 1 | 50 | 1 |  |  | 0 | 0 |
| 6 | 18 | 62 | 92 | 40 | 91 | 14 | 94 | 8 | 27 | 5 | 33 | 0 | 0 | 7 | 11 | 1 |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  | 0 | 0 |
| 7 | 2 | 62 | 47 | 9 | 92 | 9 | 56 | 8 | 58 | 6 | 68 | 0 | 0 | 23 | 22 | 2 | 17 | 1 |  |  |  |  |  |  | 6 | 50 | 1 |  |  |  |  | 0 | 0 |
| 7 | 16 | 62 | 57 | 18 | 28 | 13 | 92 | 12 | 82 | 9 | 48 | 40 | 0 | 7 | 22 | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  | 0 | 0 |
| 8 | 6 | 62 | 27 | 53 | 2 | 11 | 91 | 7 | 57 | 6 | 23 | 0 | 0 | 87 | 11 | 3 | 17 | 3 | 22 | 1 |  |  |  |  | 12 | 53 | 2 |  |  |  |  | 0 | 0 |
| 8 | 20 | 62 | 57 | 17 | 30 | 16 | 2 | 11 | 82 | 10 | 46 | 0 | 0 | 204 | 17 | 4 | 11 | 4 | 22 | 4 | 16 | 3 | 2 | 1 | 6 | 77 | 2 |  |  |  |  | 0 | 0 |
| 9 | 4 | 62 | 91 | 34 | 27 | 13 | 57 | 12 | 82 | 6 | 35 | 0 | 0 | 182 | 11 | 4 | 17 | 4 | 22 | 2 | 16 | 2 | 18 | 1 | 6 | 50 | 1 | 53 | 1 |  |  | 0 | 0 |
| 9 | 17 | 62 | 57 | 21 | 95 | 21 | 56 | 7 | 92 | 5 | 46 | 0 | 0 | 306 | 11 | 5 | 17 | 5 | 16 | 3 | 22 | 3 | 18 | 3 | 13 | 50 | 2 | 53 | 1 |  |  | 0 | 4 |

NATIONAL WATER QUALITY NETWORK

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** TENNESSEE

**MAJOR BASIN** TENNESSEE RIVER

**MINOR BASIN** TENN. RIVER-MAIN STEM & MINOR TRI

**STATION LOCATION** TENNESSEE RIVER AT
LENOIR CITY, TENNESSEE

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOS |
| 1 | 30 | 62 | 2 | 21 | 5010 | 91 | 27 | 64 | 2 | 5 | 10 | 2 | 1 | 7 | 0 | 3 | 2 | 1 | |
| 3 | 1 | 62 | 4 | 15 | 4746 | 107 | 40 | 67 | 2 | 9 | 17 | 2 | 1 | 14 | 0 | 5 | 3 | 0 | |
| 4 | 15 | 62 | 5 | 9 | 4804 | 58 | 24 | 34 | 1 | 6 | 9 | 3 | 1 | 5 | 0 | 3 | 2 | 0 | |
| 5 | 9 | 62 | 6 | 3 | 5360 | * | 36 | * | 1 | 8 | 11 | 2 | 1 | 8 | 0 | 4 | 3 | 0 | |
| 6 | 3 | 62 | 7 | 1 | 5410 | 82 | 39 | 43 | 1 | 11 | 12 | 3 | 1 | 7 | 1 | 4 | 4 | 0 | |
| 7 | 1 | 62 | 7 | 28 | 5900 | 79 | 36 | 43 | 1 | 9 | 10 | 1 | 1 | 8 | 0 | 4 | 3 | 0 | |
| 8 | 1 | 62 | 8 | 22 | 4910 | 110 | 36 | 74 | 0 | 8 | 13 | 2 | 1 | 10 | 0 | 5 | 3 | 1 | |
| 9 | 1 | 62 | 9 | 30 | 4460 | 151 | 57 | 94 | 2 | 15 | 17 | 1 | 1 | 14 | 1 | 7 | 6 | 1 | |

* NOT REPORTED - OVERHEATED

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** TENNESSEE
**MAJOR BASIN** TENNESSEE RIVER
**MINOR BASIN** TENN. RIVER-MAIN STEM + MINOR TRIB.
**STATION LOCATION** TENNESSEE RIVER AT
LENOIR CITY, TENNESSEE 107

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 1 | 30 | 62 | - | - | - | - | - | - | - | - | 17 | - | 96 | 10 | - | 22 | - | - | - |
| 2 | 5 | 62 | - | - | - | - | - | - | - | - | 26 | - | - | - | - | 86 | - | - | - |
| 2 | 19 | 62 | - | - | - | - | - | - | - | - | 19 | - | - | 10 | - | 25 | - | - | - |
| 3 | 12 | 62 | 12.0 | - | 7.4 | - | - | 2.3 | - | - | - | 62 | 104 | - | 95 | - | - | - | - |
| 3 | 19 | 62 | 14.0 | - | 7.3 | - | - | 2.8 | - | - | - | 69 | 98 | - | 60 | - | - | - | - |
| 4 | 2 | 62 | - | - | - | - | - | - | - | - | 14 | - | - | 10 | - | 17 | - | 113 | - |
| 4 | 9 | 62 | - | - | - | - | - | - | - | - | 4 | - | - | - | - | 6 | - | 59 | - |
| 4 | 16 | 62 | - | - | - | - | 15 | - | - | - | 8 | - | 92 | - | - | 21 | - | - | - |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | - | - | - | 10 | - | 28 | - | - | - |
| 5 | 8 | 62 | 18.0 | - | 7.2 | - | - | 2.8 | 6.7 | - | - | 68 | 98 | - | 75 | - | - | - | - |
| 5 | 14 | 62 | - | - | - | - | - | - | - | - | 15 | 70 | - | 10 | - | - | - | - | - |
| 5 | 20 | 62 | 20.0 | - | 7.0 | - | - | 3.4 | - | - | - | 62 | 102 | - | 75 | - | - | - | - |
| 5 | 28 | 62 | - | - | - | - | - | - | - | - | 32 | - | 100 | 5 | - | 25 | - | - | - |
| 6 | 4 | 62 | - | - | - | - | 12 | - | - | - | 19 | 78 | - | - | - | - | - | - | - |
| 6 | 11 | 62 | - | - | - | - | - | - | - | - | 58 | 164 | 304 | 10 | 490 | 270 | .0 | 585 | - |
| 6 | 25 | 62 | - | - | - | - | - | - | - | - | 19 | - | - | 5 | - | 21 | - | 120 | - |
| 7 | 4 | 62 | - | - | - | - | 24 | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 24 | 62 | - | - | - | - | - | - | - | - | 21 | - | - | 5 | - | 20 | - | - | - |
| 8 | 6 | 62 | 28.0 | - | 7.2 | - | - | 2.7 | 6.5 | - | 21 | 66 | 110 | 5 | 75 | 15 | - | - | - |
| 8 | 14 | 62 | - | - | - | - | - | - | - | - | 38 | - | - | 5 | - | 30 | .0 | - | - |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | 25 | - | - | - | - | 21 | .0 | - | - |
| 9 | 17 | 62 | 26.0 | - | 7.0 | - | - | - | - | - | - | 64 | 102 | - | 80 | - | - | - | - |
| 9 | 24 | 62 | - | - | - | - | - | - | - | - | 16 | - | - | 0 | - | 10 | .0 | 125 | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Lenoir City, Tennessee
Data Furnished by Tennessee Valley Authority
through U.S. Geological Survey

STATE Tennessee

MAJOR BASIN Tennessee River

MINOR BASIN Tennessee River-Main Stem & Minor Trib.

STATION LOCATION Tennessee River at
Lenoir City, Tennessee

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18.800 | 16.800 | 33.900 | 35.300 | 37.900 | 45.200 | 18.900 | 20.600 | 15.800 | 20.600 | 17.300 | 14.100 |
| 2 | 22.000 | 18.500 | 33.400 | 34.200 | 36.900 | 41.800 | 18.800 | 20.700 | 15.500 | 20.300 | 17.800 | 13.600 |
| 3 | 22.700 | 16.800 | 32.300 | 34.000 | 36.200 | 40.400 | 16.900 | 20.500 | 14.300 | 18.900 | 19.100 | 14.300 |
| 4 | 20.200 | 16.700 | 34.000 | 34.000 | 36.100 | 40.200 | 16.500 | 20.200 | 15.500 | 19.400 | 19.200 | 17.200 |
| 5 | 19.700 | 17.200 | 35.900 | 34.100 | 36.200 | 40.000 | 18.600 | 21.600 | 16.200 | 19.000 | 17.000 | 16.000 |
| 6 | 19.400 | 18.900 | 36.200 | 32.600 | 37.000 | 38.800 | 20.100 | 19.100 | 17.200 | 19.700 | 18.000 | 13.800 |
| 7 | 20.000 | 20.000 | 35.500 | 33.500 | 36.900 | 37.800 | 15.800 | 20.200 | 16.600 | 18.600 | 21.400 | 14.000 |
| 8 | 19.000 | 19.500 | 36.900 | 33.000 | 36.400 | 38.000 | 16.000 | 21.400 | 15.800 | 18.400 | 20.500 | 13.500 |
| 9 | 20.900 | 19.800 | 37.700 | 34.300 | 36.300 | 39.400 | 17.100 | 20.900 | 16.000 | 22.500 | 19.000 | 13.400 |
| 10 | 20.700 | 19.900 | 35.600 | 33.200 | 35.400 | 39.400 | 17.600 | 20.000 | 14.100 | 19.800 | 18.300 | 16.000 |
| 11 | 20.500 | 17.500 | 37.900 | 32.600 | 35.900 | 39.600 | 28.400 | 20.300 | 15.400 | 19.500 | 18.200 | 15.100 |
| 12 | 20.200 | 16.600 | 53.800 | 32.300 | 35.900 | 40.000 | 30.600 | 21.200 | 17.100 | 18.900 | 17.200 | 14.500 |
| 13 | 20.200 | 17.000 | 42.100 | 32.100 | 34.900 | 40.400 | 25.800 | 21.200 | 17.500 | 19.800 | 18.200 | 14.700 |
| 14 | 20.100 | 18.500 | 34.900 | 32.000 | 33.200 | 39.600 | 21.200 | 20.500 | 17.300 | 20.500 | 18.000 | 15.300 |
| 15 | 21.000 | 16.300 | 32.700 | 33.900 | 33.900 | 39.200 | 18.700 | 21.600 | 16.400 | 19.100 | 19.900 | 16.200 |
| 16 | 19.500 | 18.500 | 33.600 | 35.900 | 33.700 | 38.000 | 19.000 | 20.200 | 16.400 | 19.300 | 18.600 | 15.000 |
| 17 | 20.300 | 19.000 | 38.600 | 35.000 | 34.200 | 37.800 | 19.000 | 21.700 | 15.800 | 20.500 | 16.900 | 14.600 |
| 18 | 20.400 | 20.200 | 56.600 | 34.000 | 33.000 | 37.100 | 18.300 | 19.700 | 16.400 | 19.300 | 16.300 | 17.100 |
| 19 | 21.100 | 18.600 | 51.200 | 32.300 | 34.800 | 36.000 | 18.700 | 17.300 | 17.600 | 18.400 | 17.900 | 16.700 |
| 20 | 22.000 | 18.500 | 40.900 | 33.000 | 36.000 | 34.800 | 18.300 | 17.000 | 17.500 | 19.600 | 19.600 | 14.900 |
| 21 | 18.500 | 20.600 | 39.100 | 31.800 | 36.400 | 36.600 | 18.000 | 18.400 | 16.700 | 19.300 | 17.800 | 15.600 |
| 22 | 18.700 | 18.200 | 42.100 | 33.000 | 40.200 | 37.100 | 18.200 | 19.400 | 17.000 | 18.800 | 17.900 | 14.700 |
| 23 | 20.100 | 18.400 | 42.300 | 37.400 | 53.200 | 35.400 | 17.800 | 19.600 | 16.800 | 20.900 | 17.200 | 15.300 |
| 24 | 21.100 | 18.200 | 41.200 | 37.300 | 56.600 | 35.000 | 19.500 | 19.300 | 15.900 | 20.600 | 17.500 | 15.400 |
| 25 | 19.700 | 18.400 | 41.200 | 39.600 | 46.000 | 34.600 | 19.600 | 19.200 | 16.800 | 20.600 | 16.100 | 16.300 |
| 26 | 20.300 | 16.900 | 41.700 | 38.900 | 48.000 | 37.100 | 20.100 | 18.200 | 17.700 | 21.300 | 16.200 | 16.800 |
| 27 | 20.600 | 17.100 | 41.300 | 43.200 | 44.600 | 34.200 | 19.200 | 17.100 | 17.400 | 19.500 | 16.500 | 17.000 |
| 28 | 18.800 | 17.600 | 41.500 | 46.800 | 44.800 | 33.400 | 20.000 | 19.400 | 18.000 | 19.600 | 17.500 | 15.100 |
| 29 | 19.400 | 17.700 | 42.600 | 44.800 |  | 33.300 | 20.100 | 18.600 | 17.400 | 20.000 | 18.000 | 15.700 |
| 30 | 18.100 | 17.800 | 38.600 | 38.500 |  | 31.500 | 19.600 | 19.500 | 16.400 | 20.700 | 17.300 | 16.200 |
| 31 | 17.800 |  | 39.600 | 35.900 |  | 34.400 |  | 19.800 |  | 20.900 | 17.800 |  |

Computed as sum of Little Tennessee River at McGhee, Tennessee plus the sum of Tennessee River at Fort Loudon Dam

**STATION LOCATION** TOMBIGBEE RIVER BELOW

COLUMBUS, MISSISSIPPI

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | •CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 16 | 61 | 10 | 30 | 4400 | 251 | 96 | 155 | 4 | 26 | 19 | 2 | 2 | 14 | 1 | 9 | 12 | 1 | 25 |
| 1 | 8 | 62 | 1 | 12 | 2009 | 215 | 87 | 128 | 3 | 26 | 30 | 2 | 1 | 27 | 0 | 10 | 3 | 2 | 13 |
| 2 | 12 | 62 | 2 | 19 | 1723 | 280 | 66 | 214 | 1 | 12 | 25 | 3 | 2 | 19 | 1 | 10 | 5 | 1 | 12 |
| 3 | 12 | 62 | 3 | 19 | 852 | * | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 5 | 14 | 62 | 5 | 21 | 5000# | 102 | 53 | 49 | 3 | 15 | 11 | 1 | 1 | 8 | 1 | 10 | 5 | 0 | 9 |
| 6 | 11 | 62 | 6 | 18 | 4960 | 120 | 55 | 65 | 3 | 15 | 12 | 2 | 1 | 9 | 0 | 5 | 5 | 1 | 14 |
| 7 | 16 | 62 | 7 | 23 | 4590 | 101 | 46 | 55 | 0 | 12 | 13 | 2 | 1 | 9 | 1 | 5 | 3 | 1 | 12 |
| 8 | 20 | 62 | 8 | 27 | 995 | 134 | 41 | 93 | 0 | 10 | 19 | 3 | 2 | 14 | 0 | 4 | 1 | 1 | 6 |
| 9 | 18 | 62 | 9 | 25 | 855 | 315 | 60 | 255 | 1 | 20 | 25 | 6 | 4 | 13 | 2 | 8 | 2 | 2 | 2 |

# ESTIMATED

* LOW FLOW – NOT PROCESSED

**STATION LOCATION** TOMBIGBEE RIVER BELOW
COLUMBUS, MISSISSIPPI

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 10 | 1 | 61 | 10 | 14 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 4 | 8 | 5 | 10 | 6 | | | | | | |
| 10 | 9 | 61 | 10 | 30 | 0 | 1 | 0 | 1 | 0 | 1 | 8 | 5 | 19 | 5 | 27 | 7 | | | | | | |
| 10 | 16 | 61 | 10 | 26 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 4 | 4 | 4 | 10 | 6 | | | | | | |
| 10 | 23 | 61 | 11 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 4 | 6 | 4 | 9 | 6 | | | | | | |
| 10 | 30 | 61 | 11 | 7 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 4 | 6 | 4 | 10 | 6 | | | | | | |
| 11 | 6 | 61 | 11 | 16 | 0 | 1 | 0 | 1 | 0 | 1 | 26 | 4 | 12 | 6 | 38 | 7 | | | | | | |
| 11 | 13 | 61 | 11 | 27 | 1 | 1 | 0 | 1 | 1 | 1 | 40 | 5 | 26 | 5 | 66 | 7 | | | | | | |
| 11 | 20 | 61 | 11 | 30 | 1 | 1 | 0 | 0 | 1 | 1 | 25 | 5 | 23 | 4 | 48 | 6 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | 3 | 2 | 0 | 1 | 3 | 2 | 155 | 11 | 36 | 6 | 191 | 13 | | | | | | |
| 12 | 11 | 61 | 12 | 19 | 2 | 2 | 0 | 1 | 2 | 2 | 176 | 10 | 49 | 5 | 225 | 11 | | | | | | |
| 12 | 28 | 61 | 1 | 11 | 0 | 1 | 0 | 1 | 0 | 1 | 27 | 5 | 30 | 5 | 57 | 7 | | | | | | |
| 1 | 4 | 62 | 1 | 15 | 2 | 1 | 0 | 1 | 2 | 1 | 88 | 8 | 24 | 5 | 112 | 9 | | | | | | |
| 1 | 8 | 62 | 1 | 22 | 1 | 1 | 0 | 1 | 1 | 1 | 108 | 7 | 67 | 5 | 175 | 9 | | | | | | |
| 1 | 15 | 62 | 1 | 26 | 2 | 2 | 0 | 1 | 2 | 2 | 138 | 8 | 36 | 5 | 174 | 9 | | | | | | |
| 1 | 22 | 62 | 2 | 2 | 2 | 1 | 0 | 0 | 2 | 1 | 87 | 8 | 26 | 6 | 113 | 10 | | | | | | |
| 1 | 29 | 62 | 2 | 8 | 1 | 1 | 1 | 1 | 2 | 1 | 84 | 7 | 70 | 6 | 154 | 9 | | | | | | |
| 2 | 5 | 62 | 2 | 13 | 0 | 1 | 0 | 0 | 0 | 1 | 85 | 6 | 46 | 5 | 131 | 8 | | | | | | |
| 2 | 12 | 62 | 2 | 21 | 1 | 1 | 0 | 0 | 1 | 1 | 29 | 5 | 15 | 5 | 44 | 7 | | | | | | |
| 2 | 19 | 62 | 3 | 7 | 1 | 1 | 0 | 1 | 1 | 1 | 122 | 7 | 36 | 5 | 158 | 9 | | | | | | |
| 2 | 26 | 62 | 3 | 8 | 2 | 2 | 0 | 1 | 2 | 2 | 130 | 8 | 49 | 5 | 179 | 9 | | | | | | |
| 3 | 5 | 62 | 3 | 15 | 1 | 1 | 0 | 1 | 1 | 1 | 94 | 9 | 41 | 6 | 135 | 11 | | | | | | |
| 3 | 12 | 62 | 3 | 27 | 3 | 2 | 0 | 1 | 3 | 2 | 195 | 9 | 50 | 5 | 245 | 10 | | | | | | |
| 3 | 19 | 62 | 3 | 29 | 0 | 1 | 0 | 1 | 0 | 1 | 27 | 5 | 19 | 5 | 46 | 7 | | | | | | |
| 3 | 26 | 62 | 4 | 12 | 1 | 1 | 1 | 1 | 2 | 1 | 218 | 10 | 42 | 5 | 260 | 11 | | | | | | |
| 4 | 2 | 62 | 4 | 12 | 2 | 2 | 0 | 1 | 2 | 2 | 378 | 18 | 94 | 6 | 472 | 19 | | | | | | |
| 4 | 9 | 62 | 4 | 26 | 1 | 1 | 0 | 0 | 1 | 1 | 73 | 6 | 46 | 5 | 119 | 7 | | | | | | |
| 4 | 16 | 62 | 5 | 1 | 3 | 2 | 0 | 1 | 3 | 2 | 163 | 14 | 60 | 5 | 223 | 15 | | | | | | |
| 4 | 23 | 62 | 5 | 31 | 1 | 1 | 0 | 1 | 1 | 1 | 84 | 7 | 86 | 7 | 170 | 10 | | | | | | |
| 4 | 30 | 62 | 5 | 25 | 0 | 1 | 0 | 1 | 0 | 1 | 52 | 7 | 27 | 6 | 79 | 9 | | | | | | |
| 5 | 7 | 62 | 6 | 12 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 5 | 36 | 6 | 43 | 7 | | | | | | |
| 5 | 14 | 62 | 6 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 6 | 17 | 7 | 23 | 9 | | | | | | |
| 5 | 21 | 62 | 6 | 25 | 0 | 1 | 0 | 0 | 0 | 1 | 7 | 7 | 13 | 7 | 20 | 10 | | | | | | |
| 5 | 28 | 62 | 6 | 29 | 1 | 1 | 1 | 1 | 2 | 1 | 5 | 7 | 9 | 7 | 14 | 10 | | | | | | |
| 6 | 5 | 62 | 7 | 6 | 2 | 2 | 0 | 1 | 2 | 2 | 78 | 9 | 35 | 4 | 113 | 11 | | | | | | |
| 6 | 11 | 62 | 7 | 9 | 0 | 1 | 0 | 1 | 0 | 1 | 21 | 6 | 17 | 7 | 38 | 9 | | | | | | |
| 6 | 18 | 62 | 7 | 16 | 1 | 1 | 0 | 0 | 1 | 1 | 21 | 12 | 1 | 5 | 22 | 13 | | | | | | |
| 6 | 25 | 62 | 7 | 31 | 1 | 1 | 0 | 0 | 1 | 1 | 25 | 8 | 9 | 6 | 34 | 10 | | | | | | |
| 7 | 9 | 62 | 8 | 3 | 4 | 2 | 1 | 1 | 5 | 2 | 40 | 8 | 23 | 5 | 63 | 9 | | | | | | |
| 7 | 16 | 62 | 8 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 16 | 6 | 13 | 6 | 29 | 8 | | | | | | |
| 7 | 23 | 62 | 8 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 6 | 8 | 6 | 8 | 8 | | | | | | |
| 7 | 30 | 62 | 8 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 6 | 7 | 5 | 18 | 7 | | | | | | |

## RADIOACTIVITY DETERMINATIONS

**STATION LOCATION** TOMBIGBEE RIVER BELOW
COLUMBUS, MISSISSIPPI

95

| DATE SAMPLE TAKEN | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | | ALPHA | | BETA | |
| DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 6 | 62 | 10 | 8 | 0 | 1 | 0 | 0 | 0 | 1 | 14 | 6 | 7 | 5 | 21 | 7 | | | | | | | |
| 13 | 62 | 8 | 29 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 6 | 10 | 6 | 17 | 8 | | | | | | | |
| 20 | 62 | 9 | 4 | 1 | 1 | 0 | 0 | 1 | 1 | 4 | 7 | 12 | 7 | 16 | 10 | | | | | | | |
| 27 | 62 | 9 | 19 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 6 | 7 | 9 | 12 | 11 | | | | | | | |
| 4 | 62 | 9 | 30 | - | - | - | - | - | - | 9 | 5 | 5 | 5 | 14 | 7 | | | | | | | |
| 11 | 62 | 12 | 11 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 13 | 4 | 8 | 5 | 15 | | | | | | | |
| 18 | 62 | 10 | 22 | 0 | 1 | 0 | 0 | 0 | 1 | 5 | 3 | 10 | 3 | 15 | 4 | | | | | | | |
| 25 | 62 | 10 | 24 | 1 | 0 | 0 | 1 | 1 | 1 | 13 | 5 | 6 | 6 | 19 | 8 | | | | | | | |

**MINOR BASIN** UPPER TOMBIGBEE RIVER

**STATION LOCATION** TOMBIGBEE RIVER BELOW
COLUMBUS, MISSISSIPPI

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10 |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS |
| 10 | 16 | 61 | 400 | 0 | 0 | 60 | 0 | 80 | 0 | 210 | 80 | 40 | 100 | | | | | | | | | | | | | | | | | | | |
| 11 | 13 | 61 | 200 | 0 | .20 | 20 | 0 | 20 | 0 | 70 | 70 | 70 | 90 | | | | | | | | | | | | | | | | | | | |
| 11 | 27 | 61 | 400 | 0 | 0 | 20 | 0 | 250 | 0 | 70 | 70 | 20 | 90 | 51 | 1 | | | | | | | | | | | | | | | | | |
| 12 | 11 | 61 | 200 | 0 | 0 | 20 | 0 | 0 | 0 | 40 | 190 | 20 | 40 | | | | | | | | | | | | | | | | | | | |
| 12 | 28 | 61 | 00 | 0 | 0 | 0 | 0 | 20 | 0 | 20 | 0 | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| 1 | 8 | 62 | 500 | 270 | 0 | 0 | 0 | 70 | 0 | 70 | 70 | 50 | 50 | | | | | | | | | | | | | | | | | | | |
| 1 | 22 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 20 | | | | | | | | | | | | | | | | | | | |
| 2 | 12 | 62 | 100 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 20 | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| 2 | 26 | 62 | 300 | 0 | 0 | 40 | 0 | 20 | 60 | 20 | 190 | 0 | 0 | | | | | | | | | | | | | | | | | | | |
| 3 | 12 | 62 | 400 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 270 | 40 | 20 | | | | | | | | | | | | | | | | | | | |
| 3 | 26 | 62 | 1000 | 0 | 0 | 210 | 0 | 80 | 80 | 60 | 540 | 0 | 170 | 92 | 1 | | | | | | | | | | | | | | | | | |
| 4 | 9 | 62 | 800 | 0 | 20 | 60 | 20 | 60 | 250 | 60 | 330 | 20 | 210 | | | | | | | | | | | | | | | | | | | |
| 4 | 23 | 62 | 800 | 0 | 0 | 60 | 0 | 210 | 270 | 80 | 170 | 0 | 40 | 51 | 1 | 60 | 1 | | | | | | | | | | | | | | | |
| 5 | 14 | 62 | 3500 | 120 | 0 | 970 | 0 | 870 | 210 | 790 | 500 | 60 | 80 | 51 | 3 | 25 | 2 | 38 | 2 | 71 | 2 | 60 | 1 | 68 | 1 | | | | | | | |
| 5 | 28 | 62 | 14900 | 250 | 460 | 2830 | 290 | 1140 | 0 | 8480 | 1480 | 3140 | 890 | 68 | 6 | 71 | 3 | 57 | 3 | 24 | 2 | 38 | 2 | 40 | 2 | 17 | 2 | 29 | 1 | 30 | 1 | 51 |
| 6 | 11 | 62 | 800 | 60 | 20 | 80 | 0 | 100 | 100 | 150 | 290 | 20 | 80 | | | | | | | | | | | | | | | | | | | |
| 6 | 25 | 62 | 2200 | 20 | 20 | 330 | 0 | 1040 | 60 | 230 | 460 | 20 | 20 | 57 | 3 | 24 | 1 | 88 | 1 | | | | | | | | | | | | | |
| 7 | 9 | 62 | 600 | 0 | 0 | 20 | 80 | 40 | 0 | 170 | 330 | 20 | 40 | 68 | 1 | | | | | | | | | | | | | | | | | |
| 7 | 23 | 62 | 9600 | 540 | 120 | 1910 | 0 | 660 | 40 | 4890 | 1410 | 1780 | 80 | 68 | 5 | 71 | 4 | 38 | 3 | 88 | 3 | 3 | 2 | 51 | 2 | 52 | 1 | 69 | 1 | 86 | 1 | 25 |
| 8 | 13 | 62 | 2900 | 170 | 60 | 430 | 0 | 1010 | 210 | 580 | 460 | 80 | 40 | 68 | 2 | 51 | 2 | 56 | 1 | 38 | 1 | 63 | 1 | | | | | | | | | |
| 8 | 27 | 62 | 12500 | 170 | 0 | 0 | 0 | 130 | 0 | 10510 | 1650 | 4140 | 510 | 68 | 7 | 85 | 3 | 69 | 3 | 88 | 2 | 38 | 1 | 24 | 1 | 4 | 1 | | | | | |
| 9 | 11 | 61 | 3600 | 90 | 20 | 360 | 0 | 140 | 0 | 2810 | 230 | 1730 | 320 | 68 | 5 | | | | | | | | | | | | | | | | | |
| 9 | 25 | 62 | 800 | 0 | 0 | 50 | 0 | 270 | 250 | 200 | 50 | 270 | 0 | 62 | 1 | 56 | 1 | 68 | 1 | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | PROTOZOA *(Identifiable) Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 16 | 61 | 26 | 33 | 92 | 6 | 70 | 6 | 65 | 5 | 50 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 13 | 61 | 26 | 14 | 62 | 14 | 10 | 9 | 52 | 8 | 55 | 0 | 0 | 6 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 11 | 27 | 61 | 62 | 26 | 92 | 11 | 26 | 5 | 31 | 3 | 55 | 180 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 11 | 61 | | | | | | | | | | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 12 | 28 | 61 | | | | | | | | | | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 1 | 8 | 62 | | | | | | | | | | 110 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 22 | 62 | | | | | | | | | | 70 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 2 | 12 | 62 | | | | | | | | | | 100 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 2 | 26 | 62 | | | | | | | | | | 60 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 1 | 62 | 92 | 20 | 74 | 11 | 82 | 6 | 65 | 4 | 59 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 3 | 26 | 62 | 92 | 49 | 65 | 8 | 33 | 4 | 43 | 3 | 36 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 9 | 62 | 92 | 15 | 43 | 10 | 57 | 8 | 86 | 7 | 60 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 23 | 62 | 57 | 14 | 26 | 11 | 92 | 7 | 54 | 4 | 64 | 0 | 0 | 42 | 11 | 3 | 21 | 2 | | | | | | | 16 | 76 | 1 | 52 | 1 | 53 | 1 | 0 | 0 |
| 5 | 14 | 62 | 27 | 16 | 26 | 10 | 57 | 8 | 65 | 8 | 58 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 5 | 28 | 62 | 26 | 25 | 27 | 21 | 82 | 11 | 71 | 5 | 38 | 380 | 0 | 10 | 22 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 11 | 62 | 92 | 25 | 53 | 11 | 71 | 8 | 43 | 7 | 49 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 25 | 62 | 26 | 35 | 82 | 15 | 71 | 9 | 65 | 4 | 37 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 9 | 62 | 26 | 26 | 92 | 12 | 64 | 8 | 55 | 3 | 51 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 23 | 62 | 26 | 51 | 82 | 26 | 71 | 9 | 70 | 5 | 9 | 0 | 0 | 382 | 22 | 7 | 2 | 4 | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 13 | 62 | 26 | 47 | 75 | 9 | 71 | 7 | 82 | 6 | 31 | 0 | 0 | 2 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 27 | 62 | 26 | 87 | 53 | 9 | 71 | 2 | 56 | 1 | 1 | 0 | 0 | 330 | 22 | 6 | 7 | 1 | 2 | 1 | 15 | 1 | | | 0 | | | | | | | 0 | 0 |
| 9 | 11 | 61 | 26 | 80 | 82 | 4 | 70 | 2 | 53 | 1 | 13 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 25 | 62 | 26 | 23 | 91 | 9 | 57 | 8 | 94 | 8 | 52 | 0 | 0 | 6 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

MISSISSIPPI
**MAJOR BASIN** SOUTHEAST
**MINOR BASIN** UPPER TOMBIGBEE RIVER
**STATION LOCATION** TOMBIGBEE RIVER BELOW
COLUMBUS, MISSISSIPPI

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | |
| 11 | 20 | 61 | - | - | - | - | - | - | - | - | 13 | - | 112 | 35 | 155 | 15 | .3 | - |
| 11 | 27 | 61 | - | - | - | - | 17 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 11 | 61 | - | - | - | - | - | - | - | - | 6 | 50 | 58 | 10 | - | 14 | - | - |
| 12 | 28 | 61 | - | - | 7.7 | - | - | - | - | - | 6 | - | 44 | 10 | - | 14 | - | - |
| 1 | 15 | 62 | - | - | - | - | 12 | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 12 | 62 | - | - | - | - | - | - | - | - | 5 | - | - | - | - | 10 | - | - |
| 2 | 19 | 62 | - | - | - | - | 13 | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | 20 | - | - | - | - |
| 3 | 12 | 62 | - | - | 7.4 | - | - | - | - | - | 5 | 38 | 56 | 20 | 1180 | 12 | - | - |
| 3 | 26 | 62 | - | - | - | - | - | - | - | - | 6 | - | 64 | 10 | - | 44 | - | - |
| 4 | 2 | 62 | - | - | - | - | - | - | - | - | 7 | 32 | 40 | 10 | *25 | 7 | .0 | 54 |
| 4 | 16 | 62 | - | - | - | - | - | - | - | - | 8 | - | - | 15 | - | 1 | - | - |
| 4 | 20 | 62 | - | - | - | - | - | - | - | - | 4 | 32 | 32 | 15 | - | 6 | - | - |
| 4 | 30 | 62 | - | - | - | - | - | - | - | - | 4 | - | 44 | 10 | - | 13 | - | - |
| 5 | 14 | 62 | - | - | - | - | - | - | - | - | 7 | - | - | 5 | - | - | - | - |
| 5 | 21 | 62 | - | - | - | - | 10 | - | - | - | - | - | 40 | - | - | 8 | .0 | - |
| 5 | 28 | 62 | - | - | - | - | - | - | - | - | 7 | - | - | - | - | 12 | - | - |
| 7 | 23 | 62 | - | - | - | - | - | - | - | - | 7 | 40 | 52 | 5 | 25 | 25 | .0 | - |
| 7 | 30 | 62 | - | - | 7.9 | - | - | - | - | - | 6 | 36 | 40 | 0 | *25 | 7 | - | - |
| 8 | 6 | 62 | - | - | 7.9 | - | - | - | - | - | 5 | 26 | 48 | 5 | *25 | 8 | - | - |
| 8 | 27 | 62 | - | - | - | - | 13 | - | - | - | 12 | 28 | 48 | 5 | 25 | 17 | .0 | - |
| 9 | 4 | 62 | - | - | - | - | - | - | - | - | 8 | 12 | 56 | 0 | 25 | 38 | - | - |
| 9 | 24 | 62 | - | - | - | - | 17 | - | - | - | - | - | - | - | - | - | - | - |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Computed Data for Columbus, Mississippi
Operated by U.S. Geological Survey

STATE Mississippi

MAJOR BASIN Southeast

MINOR BASIN Upper Tombigbee River

STATION LOCATION Tombigbee River below
Columbus, Mississippi

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.660 | 4.180 | 2.950 | 10.600 | 2.870 | 34.400 | 56.600 | 5.260 | 1.860 | 1.430 | 1.070 | 1.300 |
| 2 | 1.440 | 3.980 | 2.710 | 13.200 | 2.850 | 28.500 | 62.100 | 5.620 | 1.750 | 1.360 | 1.040 | 1.350 |
| 3 | 1.270 | 3.440 | 2.510 | 13.300 | 3.210 | 23.400 | 56.700 | 5.790 | 1.620 | 1.340 | .975 | 1.460 |
| 4 | 1.110 | 3.170 | 2.330 | 13.600 | 4.380 | 19.000 | 51.900 | 4.920 | 1.500 | 1.370 | .881 | 1.710 |
| 5 | 1.010 | 2.760 | 2.210 | 13.200 | 4.260 | 14.800 | 44.300 | 4.090 | 1.440 | 1.300 | .875 | 2.010 |
| 6 | 1.190 | 2.470 | 2.130 | 11.000 | 3.880 | 11.700 | 35.400 | 3.680 | 1.440 | 1.210 | .844 | 1.790 |
| 7 | 1.760 | 2.240 | 2.080 | 9.650 | 3.580 | 11.700 | 28.800 | 4.100 | 2.330 | 2.240 | .838 | 1.670 |
| 8 | 2.490 | 1.920 | 2.040 | 7.960 | 5.920 | 22.100 | 22.600 | 5.860 | 2.650 | 3.180 | .859 | 1.840 |
| 9 | 3.540 | 1.700 | 2.040 | 5.890 | 9.000 | 28.200 | 20.800 | 6.420 | 2.950 | 3.410 | 1.970 | 1.690 |
| 10 | 4.190 | 1.960 | 2.020 | 4.670 | 8.200 | 24.400 | 19.000 | 8.080 | 2.690 | 2.560 | 1.860 | 1.530 |
| 11 | 3.220 | 4.650 | 2.060 | 4.000 | 6.430 | 21.900 | 16.000 | 6.300 | 3.030 | 1.830 | 1.370 | 1.360 |
| 12 | 2.630 | 4.280 | 3.000 | 3.480 | 5.400 | 20.800 | 17.000 | 5.530 | 2.760 | 4.750 | 1.050 | 1.210 |
| 13 | 2.300 | 3.770 | 3.740 | 3.140 | 4.870 | 21.500 | 20.600 | 4.880 | 2.630 | 7.850 | .879 | 1.120 |
| 14 | 1.990 | 3.290 | 3.180 | 2.990 | 4.630 | 26.100 | 19.400 | 4.080 | 2.450 | 8.140 | .779 | 1.060 |
| 15 | 1.670 | 2.840 | 2.870 | 3.140 | 4.450 | 25.300 | 19.700 | 3.730 | 2.250 | 7.210 | .696 | 1.070 |
| 16 | 1.390 | 2.530 | 2.640 | 3.690 | 4.120 | 24.100 | 18.700 | 6.970 | 2.010 | 8.140 | 2.340 | 1.220 |
| 17 | 1.370 | 2.470 | 2.610 | 3.800 | 3.840 | 21.400 | 15.400 | 8.430 | 1.920 | 6.400 | 6.910 | 1.090 |
| 18 | 1.450 | 2.940 | 2.440 | 3.490 | 5.130 | 22.300 | 12.400 | 6.500 | 1.880 | 4.940 | 9.330 | .995 |
| 19 | 1.360 | 2.670 | 2.260 | 3.360 | 12.900 | 24.900 | 10.400 | 4.630 | 1.760 | 3.780 | 9.080 | .929 |
| 20 | 1.220 | 2.540 | 2.220 | 5.510 | 24.300 | 22.000 | 8.390 | 3.500 | 2.280 | 2.660 | 5.520 | .877 |
| 21 | 1.710 | 2.350 | 2.880 | 6.870 | 44.500 | 22.900 | 7.120 | 2.940 | 7.490 | 2.160 | 2.990 | .840 |
| 22 | 2.050 | 2.210 | 4.850 | 5.580 | 62.800 | 23.100 | 6.320 | 2.640 | 7.880 | 1.980 | 2.140 | .799 |
| 23 | 2.160 | 2.780 | 4.150 | 4.420 | 94.100 | 21.900 | 5.640 | 2.420 | 5.250 | 1.890 | 1.730 | .787 |
| 24 | 1.770 | 5.470 | 3.630 | 3.860 | 101.000 | 20.800 | 5.040 | 2.630 | 3.630 | 1.750 | 1.490 | .767 |
| 25 | 1.570 | 5.120 | 3.140 | 3.520 | 82.800 | 18.300 | 4.550 | 2.640 | 2.840 | 2.370 | 2.480 | .742 |
| 26 | 1.440 | 4.330 | 2.900 | 3.670 | 65.100 | 16.300 | 4.380 | 2.510 | 2.630 | 2.770 | 2.730 | .724 |
| 27 | 1.300 | 3.760 | 2.780 | 4.350 | 52.600 | 14.300 | 6.560 | 2.450 | 2.230 | 2.500 | 2.940 | .696 |
| 28 | 1.170 | 3.150 | 2.620 | 4.230 | 43.500 | 18.100 | 9.780 | 2.640 | 1.960 | 1.990 | 2.290 | .681 |
| 29 | 1.090 | 2.820 | 2.510 | 3.660 |  | 27.800 | 8.560 | 2.630 | 1.770 | 1.800 | 1.800 | .662 |
| 30 | 1.060 | 2.850 | 3.720 | 3.260 |  | 29.100 | 6.710 | 2.290 | 1.650 | 1.490 | 1.570 | .659 |
| 31 | 1.660 |  | 8.030 | 3.000 |  | 39.300 |  | 2.040 |  | 1.330 | 1.400 |  |

Computed as sum of Tombigbee River at Columbus, Mississippi plus 3 times the sum of Luxapalila Creek at Steens, Mississippi.

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** CALIFORNIA-NEVADA

**MAJOR BASIN** GREAT BASIN

**MINOR BASIN** NORTHWESTERN LAHONTAN

**STATION LOCATION** TRUCKEE RIVER, CAL-NEV BORDER AT FARAD, CALIFORNIA

88

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 6 | 61 | 10 | 16 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 4 | 5 | 5 | 8 | 6 | | | | | | |
| 10 | 16 | 61 | 11 | 20 | - | - | - | - | - | - | 4 | 5 | 1 | 6 | 5 | 8 | | | | | | |
| 10 | 23 | 61 | 11 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 20 | 4 | 30 | 5 | 50 | 6 | | | | | | |
| 10 | 30 | 61 | 11 | 10 | 0 | 1 | 0 | 1 | 0 | 1 | 5 | 4 | 16 | 5 | 21 | 6 | | | | | | |
| 11 | 6 | 61 | 11 | 22 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 5 | 42 | 6 | 42 | 8 | | | | | | |
| 11 | 13 | 61 | 11 | 28 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 5 | 1 | 6 | 7 | 8 | | | | | | |
| 11 | 20 | 61 | 12 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 83 | 6 | 26 | 5 | 109 | 8 | | | | | | |
| 11 | 27 | 61 | 12 | 6 | 0 | 1 | 0 | 1 | 0 | 1 | 15 | 6 | 18 | 6 | 33 | 8 | | | | | | |
| 12 | 4 | 61 | 12 | 14 | 1 | 1 | 1 | 1 | 2 | 1 | 11 | 4 | 21 | 5 | 32 | 6 | | | | | | |
| 12 | 11 | 61 | 12 | 21 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 4 | 8 | 5 | 10 | 6 | | | | | | |
| 12 | 18 | 61 | 1 | 4 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 4 | 16 | 5 | 19 | 6 | | | | | | |
| 12 | 26 | 61 | 1 | 11 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 4 | 5 | 4 | 6 | 6 | | | | | | |
| 1 | 2 | 62 | 1 | 15 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 5 | 5 | 6 | 5 | 8 | | | | | | |
| 1 | 8 | 62 | 1 | 18 | 0 | 1 | 0 | 1 | 0 | 1 | 15 | 4 | 14 | 4 | 29 | 6 | | | | | | |
| 1 | 15 | 62 | 1 | 26 | 0 | 1 | 1 | 1 | 1 | 1 | 8 | 4 | 12 | 5 | 20 | 7 | | | | | | |
| 1 | 26 | 62 | 2 | 7 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 4 | 9 | 4 | 15 | 6 | | | | | | |
| 1 | 29 | 62 | 2 | 12 | 1 | 1 | 0 | 1 | 1 | 1 | 18 | 5 | 9 | 5 | 27 | 7 | | | | | | |
| 2 | 5 | 62 | 2 | 15 | 0 | 1 | 0 | 0 | 0 | 1 | 25 | 6 | 12 | 4 | 37 | 7 | | | | | | |
| 2 | 14 | 62 | 3 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 105 | 6 | 86 | 6 | 191 | 8 | | | | | | |
| 2 | 19 | 62 | 3 | 6 | 1 | 1 | 1 | 1 | 2 | 1 | 28 | 5 | 43 | 5 | 71 | 7 | | | | | | |
| 2 | 26 | 62 | 3 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 21 | 5 | 26 | 5 | 47 | 7 | | | | | | |
| 3 | 5 | 62 | 3 | 20 | 0 | 1 | 0 | 1 | 0 | 1 | 21 | 4 | 19 | 5 | 40 | 6 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | 0 | 1 | 0 | 1 | 0 | 1 | 29 | 5 | 49 | 6 | 78 | 7 | | | | | | |
| 3 | 19 | 62 | 4 | 3 | 0 | 1 | 0 | 1 | 0 | 1 | 13 | 4 | 15 | 5 | 28 | 6 | | | | | | |
| 4 | 2 | 62 | 4 | 19 | 1 | 1 | 0 | 0 | 1 | 1 | 44 | 6 | 18 | 4 | 62 | 7 | | | | | | |
| 4 | 9 | 62 | 4 | 23 | 1 | 2 | 1 | 1 | 2 | 2 | 109 | 13 | 23 | 4 | 132 | 14 | | | | | | |
| 4 | 18 | 62 | 5 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 12 | 5 | 12 | 5 | 24 | 7 | | | | | | |
| 5 | 22 | 62 | 6 | 30 | - | - | - | - | - | - | 134 | 17 | 7 | 3 | 141 | 17 | | | | | | |
| 5 | 28 | 62 | 6 | 28 | 0 | 1 | 0 | 0 | 0 | 1 | 5 | 6 | 7 | 5 | 12 | 8 | | | | | | |
| 6 | 4 | 62 | 7 | 10 | 1 | 1 | 0 | 1 | 1 | 1 | 5 | 5 | 21 | 6 | 26 | 8 | | | | | | |
| 6 | 11 | 62 | 7 | 16 | 0 | 1 | 0 | 0 | 0 | 1 | 5 | 6 | 5 | 6 | 10 | 8 | | | | | | |
| 6 | 18 | 62 | 7 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 5 | 9 | 5 | 17 | 7 | | | | | | |
| 6 | 25 | 62 | 7 | 31 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 7 | 3 | 6 | 4 | 9 | | | | | | |
| 7 | 2 | 62 | 8 | 6 | 0 | 0 | 1 | 1 | 1 | 1 | 3 | 5 | 15 | 6 | 18 | 7 | | | | | | |
| 7 | 9 | 62 | 10 | 17 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 5 | 2 | 5 | 6 | 7 | | | | | | |
| 7 | 23 | 62 | 8 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 2 | 6 | 2 | 10 | | | | | | |
| 7 | 30 | 62 | 9 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 6 | 5 | 6 | 10 | 8 | | | | | | |
| 8 | 6 | 62 | 9 | 30 | 0 | 0 | 0 | 1 | 0 | 1 | 7 | 6 | 4 | 6 | 11 | 8 | | | | | | |
| 8 | 13 | 62 | 8 | 23 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 5 | 3 | 5 | 4 | 7 | | | | | | |
| 8 | 20 | 62 | 9 | 19 | 0 | 0 | 1 | 1 | 1 | 1 | 5 | 5 | 24 | 6 | 29 | 7 | | | | | | |
| 8 | 27 | 62 | 9 | 21 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 7 | 4 | 8 | 5 | 11 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** CALIFORNIA-NEVADA

**MAJOR BASIN** GREAT BASIN

**MINOR BASIN** NORTHWESTERN LAHONTAN

**STATION LOCATION** TRUCKEE RIVER, CAL-NEV BORDER AT FARAD, CALIFORNIA 88

| DATE AMPLE TAKEN | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 5 | 62 | 10 | 4 | – | – | – | – | – | – | 6 | 6 | 9 | 7 | 15 | 9 | | | | | | |
| 21 | 62 | 10 | 16 | 0 | 1 | 0 | 1 | 0 | 1 | 4 | 6 | 26 | 6 | 30 | 8 | | | | | | |
| 28 | 62 | 10 | 24 | 1 | 2 | 0 | 1 | 1 | 2 | 43 | 17 | 5 | 6 | 48 | 18 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** CALIFORNIA-NEVADA
**MAJOR BASIN** GREAT BASIN
**MINOR BASIN** NORTHWESTERN LAHONTAN
**STATION LOCATION** TRUCKEE RIVER, CAL-NEV BORDER AT
FARAD, CALIFORNIA 088

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 16 | 61 | 32 | 14 | 36 | 14 | 16 | 7 | 92 | 6 | 59 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 36 | 26 | 58 | 14 | 82 | 11 | 71 | 6 | 43 | 0 | 0 | 21 | 17 | 2 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 36 | 14 | 70 | 7 | 82 | 7 | 62 | 5 | 67 | 140 | 0 | 25 | 21 | 2 | 11 | 1 | 17 | 1 | | | | | 1 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 36 | 37 | 71 | 11 | 72 | 8 | 82 | 7 | 37 | 0 | 0 | 19 | 17 | 2 | 11 | 1 | | | | | | | 1 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 36 | 48 | 71 | 6 | 93 | 4 | 46 | 4 | 38 | 0 | 0 | 11 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 2 | 62 | 36 | 57 | 92 | 9 | 70 | 5 | 82 | 5 | 24 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 36 | 48 | 71 | 11 | 92 | 5 | 93 | 4 | 32 | 0 | 0 | 24 | 15 | 1 | 11 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 36 | 29 | 71 | 8 | 92 | 8 | 72 | 6 | 49 | 70 | 0 | 17 | 15 | 2 | | | | | | | | | 4 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | 92 | 10 | 70 | 9 | 2 | 5 | 16 | 5 | 71 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 31 | 11 | 36 | 10 | 2 | 9 | 70 | 6 | 64 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 71 | 23 | 92 | 16 | 36 | 9 | 52 | 8 | 44 | 60 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 92 | 16 | 97 | 11 | 71 | 7 | 36 | 7 | 59 | 120 | 0 | 7 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 4 | 18 | 62 | 31 | 8 | 48 | 7 | 92 | 5 | 61 | 5 | 75 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 22 | 62 | 92 | 23 | 71 | 7 | 52 | 7 | 36 | 7 | 56 | 0 | 0 | 0 | | | | | | | | | | | - | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 9 | 29 | 92 | 16 | 31 | 14 | 14 | 8 | 33 | 40 | 0 | 27 | 11 | 3 | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 31 | 32 | 47 | 10 | 2 | 5 | 9 | 5 | 48 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 7 | 2 | 62 | 31 | 36 | 2 | 10 | 92 | 7 | 36 | 7 | 40 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 31 | 23 | 2 | 12 | 16 | 8 | 92 | 6 | 51 | 0 | 0 | 5 | | | | | | | | | | | 4 | 76 | 1 | | | | | 0 | 1 |
| 8 | 6 | 62 | 16 | 18 | 31 | 11 | 92 | 6 | 2 | 6 | 59 | 0 | 0 | 9 | 11 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 20 | 62 | 16 | 20 | 31 | 9 | 2 | 8 | 93 | 7 | 56 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 5 | 62 | 36 | 36 | 16 | 17 | 31 | 8 | 92 | 7 | 32 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 14 | 62 | 16 | 16 | 36 | 10 | 31 | 9 | 2 | 9 | 56 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 28 | 62 | 26 | 60 | 57 | 4 | 16 | 4 | 58 | 4 | 28 | 0 | 0 | 1630 | 11 | 8 | | | | | | | | | 0 | | | | | | | 0 | 1 |

***RESULTS IN MICROGRAMS PER LITER***
*(Parts per billion)*

**STATION LOCATION** TRUCKEE RIVER, CAL-NEV BORDER AT
FARAD, CALIFORNIA 88

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 3 | 61 | 11 | 1 | 6660 | 111 | 36 | 75 | 0 | 8 | 14 | 2 | 1 | 10 | 1 | 5 | 3 | 1 | 5 |
| 11 | 1 | 61 | 11 | 29 | 5560 | 97 | 28 | 69 | 0 | 7 | 10 | 1 | 1 | 8 | 0 | 3 | 2 | 0 | 6 |
| 12 | 4 | 61 | 1 | 2 | 5861 | 84 | 32 | 52 | 1 | 10 | 8 | 1 | 1 | 6 | 0 | 4 | 2 | 0 | 7 |
| 1 | 2 | 62 | 2 | 1 | 4990 | 79 | 17 | 62 | 0 | 4 | 7 | 1 | 1 | 5 | 0 | 2 | 1 | 1 | 2 |
| 2 | 1 | 62 | 2 | 14 | 5140 | 77 | 26 | 51 | 1 | 7 | 9 | 1 | 1 | 7 | 0 | 4 | 1 | 1 | 3 |
| 3 | 16 | 62 | 4 | 4 | 5140 | 89 | 31 | 58 | 1 | 8 | 10 | 2 | 1 | 7 | 0 | 4 | 2 | 1 | 5 |
| 5 | 22 | 62 | 6 | 4 | 3580 | 101 | 55 | 46 | 2 | 16 | 16 | 3 | 1 | 10 | 2 | 6 | 7 | 1 | 7 |
| 8 | 20 | 62 | 9 | 14 | 7150 | 106 | 39 | 67 | 1 | 10 | 9 | 1 | 1 | 7 | 0 | 4 | 4 | 1 | 10 |
| 9 | 20 | 62 | 10 | 29 | 13000# | 63 | 16 | 47 | 0 | 3 | 6 | 0 | 1 | 5 | 0 | 2 | 1 | 0 | 4 |

# ESTIMATED

MINOR BASIN NORTHWESTERN LAHONTAN

**STATION LOCATION** TRUCKEE RIVER, CAL-NEV BORDER AT

FARAD, CALIFORNIA 88

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 4 | 61 | 11.1 | 9.2 | 8.0 | - | - | - | - | - | 2 | 57 | 48 | - | 9 | - | - | - | - |
| 11 | 8 | 61 | 3.3 | 11.4 | 8.0 | - | - | - | - | - | 3 | 56 | 51 | - | 4 | 5 | - | - | - |
| 11 | 13 | 61 | 3.1 | 10.8 | 7.8 | 1.5 | - | - | - | - | 5 | 28 | 56 | 5 | - | 7 | .1 | - | - |
| 11 | 27 | 61 | - | - | - | - | - | - | - | - | - | - | - | 0 | - | 5 | .1 | 60 | - |
| 12 | 5 | 61 | .6 | 11.3 | 7.5 | - | - | - | - | - | 4 | 55 | 48 | - | - | 4 | - | 90 | - |
| 12 | 18 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 14 | - | - | - |
| 12 | 26 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 | .1 | - | - |
| 1 | 4 | 62 | .0 | 11.8 | 7.3 | 2.5 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1 | 10 | 62 | 1.1 | 11.8 | 7.6 | - | - | - | - | .0 | 6 | 55 | 49 | 5 | 7 | 6 | .0 | 88 | 120 |
| 1 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 | .0 | - | - |
| 1 | 29 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 12 | .0 | - | - |
| 2 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 9 | .0 | - | - |
| 2 | 7 | 62 | 2.2 | 11.4 | 7.3 | - | - | - | - | .0 | 5 | 52 | 47 | - | - | 6 | .0 | 84 | - |
| 2 | 12 | 62 | 1.5 | 11.8 | 7.3 | 1.2 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 14 | 62 | .6 | 11.9 | 7.3 | - | - | - | - | .0 | 3 | 49 | 45 | 5 | 11 | 4 | .1 | 81 | 4 |
| 3 | 28 | 62 | 2.4 | 11.3 | 7.4 | 1.9 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 4 | 62 | 2.7 | 11.6 | 7.2 | - | - | - | - | .0 | 2 | 34 | 34 | 20 | 20 | 5 | .1 | 68 | - |
| 4 | 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 5 | .0 | - | - |
| 5 | 11 | 62 | 7.8 | 10.8 | 7.2 | - | - | - | - | .0 | 1 | 31 | 23 | 10 | 8 | 1 | .0 | 58 | 22 |
| 5 | 23 | 62 | 9.0 | 9.1 | 7.6 | 1.7 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 6 | 62 | 9.5 | 8.9 | 7.8 | 1.0 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 11 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 22 | .0 | - | - |
| 6 | 15 | 62 | 10.1 | 9.3 | 7.5 | - | - | - | - | .0 | 1 | 31 | 25 | 5 | 1 | 1 | .5 | 42 | 340 |
| 7 | 13 | 62 | 14.4 | 8.4 | 7.7 | - | - | - | - | .1 | 3 | 39 | 31 | 10 | 8 | 1 | .0 | 59 | - |
| 7 | 18 | 62 | 10.0 | 8.2 | 7.8 | .9 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 10 | .0 | - | - |
| 8 | 6 | 62 | - | - | - | - | - | - | - | - | 9 | 42 | 40 | - | - | 5 | - | - | - |
| 8 | 10 | 62 | 13.3 | 9.0 | 7.7 | - | - | - | - | .0 | 3 | 42 | 33 | 10 | 4 | 2 | - | 60 | 50 |
| 8 | 13 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | 3 | .0 | 86 | - |
| 8 | 20 | 62 | - | - | - | - | - | - | - | - | 3 | 44 | 44 | - | - | 4 | - | - | - |
| 9 | 5 | 62 | - | - | - | - | - | - | - | - | 4 | 84 | 40 | 5 | 25 | 3 | .0 | 61 | - |
| 9 | 10 | 62 | 10.0 | 9.0 | 7.8 | 1.0 | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 14 | 62 | 14.0 | 8.9 | 7.0 | - | - | - | - | .0 | 3 | 37 | 30 | 10 | 2 | 2 | .0 | 64 | - |
| 9 | 21 | 62 | - | - | - | - | - | - | - | - | 4 | 40 | 52 | 10 | *25 | 3 | .0 | 57 | - |
| 9 | 28 | 62 | - | - | - | - | - | - | - | - | 2 | 40 | 80 | 5 | *25 | 2 | .0 | 50 | - |

Gaging Station at Farad, California
Operated by U.S. Geological Survey

STATION LOCATION Truckee Riv., Calif.-Nev. Border at Farad, California

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .094 | .092 | .094 | .114 | .149 | .155 | .670 | 1.310 | 1.220 | .488 | .516 | .502 |
| 2 | .094 | .088 | .112 | .099 | .132 | .124 | .685 | 1.420 | 1.310 | .493 | .529 | .498 |
| 3 | .084 | .086 | .105 | .110 | .124 | .142 | .725 | 1.500 | 1.330 | .547 | .488 | .498 |
| 4 | .062 | .086 | .094 | .090 | .124 | .139 | .810 | 1.680 | 1.170 | .520 | .498 | .506 |
| 5 | .058 | .084 | .094 | .092 | .126 | .157 | .932 | 2.090 | 1.050 | .498 | .498 | .506 |
| 6 | .064 | .084 | .090 | .101 | .129 | .214 | .962 | 2.050 | 1.010 | .498 | .493 | .520 |
| 7 | .088 | .086 | .088 | .099 | .149 | .255 | .986 | 1.880 | 1.020 | .502 | .498 | .511 |
| 8 | .086 | .086 | .082 | .101 | .155 | .258 | 1.110 | 2.040 | .998 | .516 | .506 | .493 |
| 9 | .082 | .086 | .086 | .099 | .387 | .264 | 1.260 | 2.180 | 1.050 | .529 | .511 | .488 |
| 10 | .080 | .084 | .107 | .096 | .462 | .249 | 1.210 | 1.770 | 1.100 | .511 | .502 | .475 |
| 11 | .078 | .082 | .099 | .072 | .298 | .249 | 1.110 | 1.460 | 1.050 | .534 | .488 | .471 |
| 12 | .078 | .078 | .122 | .069 | .246 | .234 | 1.150 | 1.270 | .992 | .588 | .484 | .480 |
| 13 | .076 | .070 | .132 | .058 | .258 | .232 | 1.260 | 1.060 | .950 | .529 | .480 | .484 |
| 14 | .076 | .078 | .110 | .064 | .298 | .234 | 1.400 | 1.010 | .865 | .538 | .506 | .480 |
| 15 | .074 | .082 | .094 | .058 | .316 | .237 | 1.620 | .938 | .770 | .524 | .516 | .484 |
| 16 | .074 | .076 | .088 | .078 | .317 | .240 | 1.510 | .980 | .770 | .511 | .511 | .475 |
| 17 | .072 | .065 | .088 | .096 | .212 | .237 | 1.570 | .938 | .816 | .511 | .506 | .480 |
| 18 | .072 | .067 | .086 | .103 | .184 | .240 | 1.680 | .904 | .870 | .506 | .498 | .488 |
| 19 | .072 | .082 | .090 | .096 | .181 | .252 | 1.740 | .962 | .909 | .493 | .493 | .480 |
| 20 | .074 | .090 | .116 | .076 | .181 | .258 | 1.500 | .926 | .876 | .488 | .502 | .475 |
| 21 | .192 | .082 | .209 | .076 | .168 | .252 | 1.360 | .870 | .826 | .556 | .493 | .475 |
| 22 | .124 | .084 | .160 | .070 | .157 | .258 | 1.420 | .909 | .780 | .534 | .493 | .475 |
| 23 | .096 | .086 | .142 | .070 | .160 | .276 | 1.480 | 1.060 | .730 | .511 | .506 | .467 |
| 24 | .088 | .084 | .132 | .070 | .157 | .320 | 1.480 | .992 | .670 | .502 | .498 | .471 |
| 25 | .084 | .088 | .126 | .080 | .149 | .348 | 1.360 | .887 | .630 | .502 | .493 | .493 |
| 26 | .082 | .094 | .119 | .080 | .136 | .365 | 1.290 | .838 | .588 | .502 | .488 | .502 |
| 27 | .094 | .103 | .116 | .080 | .126 | .395 | 1.360 | .810 | .538 | .502 | .488 | .484 |
| 28 | .124 | .088 | .105 | .080 | .155 | .402 | 1.580 | .887 | .488 | .516 | .506 | .467 |
| 29 | .110 | .090 | .105 | .090 |  | .445 | 1.350 | 1.050 | .498 | .498 | .511 | .459 |
| 30 | .096 | .090 | .105 | .090 |  | .508 | 1.290 | 1.170 | .463 | .493 | .506 | .447 |
| 31 | .092 |  | .105 | .100 |  | .640 |  | 1.180 |  | .484 | .502 |  |

# RADIOACTIVITY DETERMINATIONS

**STATE** OKLAHOMA

**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER

**MINOR BASIN** VERDIGRIS RIVER

**STATION LOCATION** VERDIGRIS RIVER AT

NOWATA, OKLAHOMA

109

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 3 | 26 | 62 | 4 | 4 | 3 | 3 | 0 | 2 | 3 | 4 | 147 | 14 | 61 | 11 | 208 | 18 | | | | | | |
| 4 | 9 | 62 | 4 | 23 | 0 | 1 | 1 | 3 | 1 | 3 | 18 | 9 | 45 | 12 | 63 | 15 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | 0 | 1 | 2 | 3 | 2 | 3 | 20 | 9 | 40 | 12 | 60 | 21 | | | | | | |
| 4 | 25 | 62 | 5 | 23 | 0 | 1 | 3 | 3 | 3 | 3 | 7 | 11 | 26 | 14 | 33 | 18 | | | | | | |
| 4 | 30 | 62 | 5 | 25 | 0 | 1 | 1 | 2 | 1 | 2 | 25 | 11 | 61 | 15 | 86 | 19 | | | | | | |
| 5 | 7 | 62 | 6 | 21 | 0 | 1 | 3 | 3 | 3 | 3 | 15 | 11 | 43 | 16 | 58 | 19 | | | | | | |
| 5 | 14 | 62 | 6 | 19 | 0 | 1 | 3 | 3 | 3 | 3 | 9 | 10 | 30 | 15 | 39 | 18 | | | | | | |
| 5 | 21 | 62 | 6 | 25 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 6 | 36 | 9 | 42 | 11 | | | | | | |
| 5 | 28 | 62 | 6 | 29 | 0 | 1 | 1 | 2 | 1 | 2 | 15 | 14 | 35 | 19 | 50 | 24 | | | | | | |
| 6 | 4 | 62 | 7 | 3 | 12 | 7 | 3 | 3 | 15 | 8 | 160 | 37 | 48 | 14 | 208 | 40 | | | | | | |
| 6 | 11 | 62 | 7 | 9 | – | – | – | – | – | – | 78 | 17 | 61 | 16 | 139 | 23 | | | | | | |
| 6 | 18 | 62 | 7 | 10 | 0 | 1 | 0 | 1 | 0 | 1 | 37 | 13 | 63 | 16 | 100 | 21 | | | | | | |
| 6 | 25 | 62 | 7 | 20 | 1 | 1 | 2 | 2 | 3 | 2 | 26 | 10 | 38 | 12 | 64 | 16 | | | | | | |
| 7 | 2 | 62 | 7 | 31 | 1 | 2 | 0 | 3 | 1 | 3 | 22 | 15 | 9 | 18 | 31 | 23 | | | | | | |
| 7 | 23 | 62 | 8 | 2 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 11 | 58 | 15 | 61 | 19 | | | | | | |
| 7 | 30 | 62 | 8 | 21 | 0 | 1 | 2 | 3 | 2 | 3 | 8 | 11 | 39 | 14 | 47 | 18 | | | | | | |
| 8 | 6 | 62 | 8 | 17 | 0 | 1 | 0 | 2 | 0 | 2 | 3 | 12 | 42 | 15 | 45 | 19 | | | | | | |
| 8 | 13 | 62 | 8 | 30 | 1 | 1 | 0 | 1 | 1 | 1 | 5 | 11 | 32 | 15 | 37 | 19 | | | | | | |
| 8 | 20 | 62 | 10 | 7 | 0 | 1 | 1 | 3 | 1 | 3 | 4 | 10 | 27 | 16 | 31 | 19 | | | | | | |
| 9 | 4 | 62 | 9 | 13 | 11 | 6 | 0 | 1 | 11 | 6 | 84 | 40 | 0 | 15 | 84 | 43 | | | | | | |
| 9 | 10 | 62 | 9 | 25 | 4 | 4 | 0 | 0 | 4 | 4 | 93 | 38 | 73 | 9 | 166 | 39 | | | | | | |
| 9 | 17 | 62 | 10 | 10 | 4 | 7 | 1 | 1 | 5 | 7 | 123 | 66 | 41 | 14 | 164 | 67 | | | | | | |
| 9 | 24 | 62 | 10 | 18 | 10 | 10 | 0 | 1 | 10 | 10 | 115 | 42 | 29 | 7 | 144 | 43 | | | | | | |

# PLANKTON POPULATION

**STATE** OKLAHOMA
**MAJOR BASIN** SOUTHWEST—LOWER MISSISSIPPI RIVER
**MINOR BASIN** VERDIGRIS RIVER
**STATION LOCATION** VERDIGRIS RIVER AT
NOWATA, OKLAHOMA 109

| DATE OF SAMPLE | | | ALGAE (Number per milliliter) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 3 | 19 | 62 | 37400 | 50 | 50 | 90 | 0 | 400 | * | 17290 | 760 | 1920 | 110 | 65 | 7 | 71 | 7 | 68 | 4 | 91 | 2 | 51 | 2 | 92 | 1 | 61 | 1 | 60 | 1 | | | | |
| 4 | 2 | 62 | 800 | 80 | 0 | 0 | 0 | 150 | 60 | 100 | 410 | 100 | 20 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 4 | 16 | 62 | 51200 | 8650 | 0 | 4370 | 0 | 10800 | 1080 | 25050 | 1280 | 4550 | 410 | 71 | 7 | 69 | 6 | 57 | 6 | 9 | 5 | 3 | 5 | 25 | 5 | 51 | 5 | 68 | 3 | 61 | 2 | 60 | 2 |
| 5 | 7 | 62 | 28200 | 80 | 300 | 3120 | * | 340 | 1060 | 17680 | 1860 | 3670 | 840 | 71 | 7 | 50 | 5 | 60 | 3 | 30 | 3 | 91 | 2 | 88 | 2 | 38 | 2 | 68 | 2 | 17 | 1 | 33 | 1 |
| 5 | 21 | 62 | 15300 | 0 | 80 | 1350 | 40 | 760 | 0 | 12110 | 970 | 5740 | 420 | 71 | 7 | 38 | 3 | 57 | 3 | 40 | 2 | 92 | 1 | 91 | 1 | 88 | 1 | | | | | | |
| 6 | 4 | 62 | 7100 | 0 | 0 | 210 | 0 | 210 | 80 | 3110 | 3480 | 1080 | 500 | 71 | 5 | 88 | 3 | 92 | 3 | 86 | 1 | 69 | 1 | 97 | 1 | 68 | 1 | 80 | 1 | | | | |
| 6 | 18 | 62 | 5500 | 420 | 0 | 300 | 0 | 0 | 0 | 2740 | 2030 | 1220 | 680 | 71 | 5 | 88 | 3 | 2 | 2 | 92 | 2 | 87 | 1 | 85 | 1 | | | | | | | | |
| 7 | 2 | 62 | 10900 | 0 | 0 | 170 | 0 | 0 | 0 | 1600 | 9070 | 720 | 420 | 86 | 4 | 88 | 4 | 71 | 4 | 89 | 3 | 92 | 3 | 87 | 1 | 69 | 1 | | | | | | |
| 7 | 16 | 62 | 7000 | 170 | 0 | 380 | 0 | 130 | 0 | 4980 | 1310 | 840 | 760 | 71 | 5 | 68 | 3 | 88 | 1 | 38 | 1 | 69 | 1 | | | | | | | | | | |
| 8 | 6 | 62 | 3700 | 60 | 0 | 430 | 0 | 930 | 60 | 1820 | 410 | 410 | 40 | 68 | 3 | 51 | 3 | 71 | 2 | 38 | 1 | | | | | | | | | | | | |
| 8 | 20 | 62 | 2800 | 250 | 0 | 100 | 0 | 330 | 370 | 1370 | 370 | 290 | 250 | 68 | 3 | 71 | 3 | 63 | 2 | 2 | 1 | 51 | 1 | 88 | 1 | | | | | | | | |
| 9 | 4 | 62 | 1900 | 40 | 40 | 60 | 0 | 290 | 0 | 500 | 950 | 170 | 120 | 88 | 2 | 89 | 1 | 68 | 1 | 71 | 1 | | | | | | | | | | | | |
| 9 | 17 | 62 | 4100 | 20 | 0 | 0 | 0 | 330 | 20 | 2190 | 1490 | 580 | 0 | 68 | 4 | 88 | 2 | 71 | 1 | 87 | 1 | | | | | | | | | | | | |
| *3 | 19 | 62 | | | | | | | 18760 | | | | | | | | | | | | | | | | | | | | | | | | |
| *5 | 7 | 62 | | | | | 3760 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| | | | | | | | | | | | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 3 | 19 | 62 | 82 | 64 | 86 | 15 | 92 | 9 | 27 | 5 | 7 | 20 | 20 | 37 | 21 | 3 | 11 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 92 | 38 | 86 | 18 | 51 | 7 | 82 | 5 | 32 | 20 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 4 | 16 | 62 | 82 | 49 | 80 | 34 | 27 | 3 | 86 | 3 | 11 | 120 | 20 | 28 | 17 | 1 | 11 | 1 | 15 | 1 | | | | | 4 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 80 | 61 | 82 | 21 | 86 | 4 | 56 | 1 | 13 | 80 | 0 | 126 | 11 | 5 | 2 | 1 | 21 | 1 | 15 | 1 | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 82 | 91 | 80 | 3 | 92 | 2 | 86 | 1 | 3 | 80 | 0 | 554 | 22 | 6 | 2 | 6 | 11 | 5 | 21 | 3 | 17 | 1 | 0 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 80 | 24 | 71 | 20 | 92 | 18 | 53 | 6 | 32 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 80 | 64 | 56 | 8 | 71 | 3 | 92 | 2 | 23 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 80 | 69 | 58 | 6 | 56 | 3 | 82 | 3 | 19 | 80 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 80 | 41 | 26 | 19 | 58 | 7 | 53 | 6 | 27 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 26 | 44 | 82 | 24 | 57 | 12 | 58 | 3 | 17 | 0 | 0 | 707 | 17 | 6 | 46 | 6 | 2 | 5 | 22 | 5 | 21 | 3 | 12 | 50 | 2 | 53 | 1 | | | 0 | 0 |
| 8 | 20 | 62 | 82 | 46 | 26 | 39 | 27 | 4 | 57 | 1 | 10 | 0 | 0 | 125 | 22 | 4 | 17 | 3 | 16 | 3 | 2 | 1 | 15 | 1 | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 75 | 16 | 80 | 6 | 26 | 6 | 71 | 4 | 68 | 0 | 0 | – | | | | | | | | | | | – | | | | | | | – | – |
| 9 | 17 | 62 | 26 | 45 | 82 | 4 | 92 | 4 | 71 | 3 | 44 | 0 | 0 | – | | | | | | | | | | | – | | | | | | | – | – |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** OKLAHOMA
**MAJOR BASIN** SOUTHWEST-LOWER MISSISSIPPI RIVER
**MINOR BASIN** VERDIGRIS RIVER
**STATION LOCATION** VERDIGRIS RIVER AT
NOWATA, OKLAHOMA 1

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 5 | 24 | 62 | 6 | 1 | 5108 | 196 | 109 | 87 | 2 | 22 | 27 | 1 | 1 | 22 | 3 | 18 | 13 | 1 | 26 |
| 7 | 1 | 62 | 7 | 8 | 5032 | 123 | 58 | 65 | 1 | 16 | 18 | 1 | 1 | 14 | 2 | 8 | 3 | 1 | 11 |
| 8 | 11 | 62 | 8 | 19 | 5020 | 202 | 86 | 116 | 1 | 22 | 25 | 1 | 1 | 21 | 2 | 14 | 8 | 3 | 13 |
| 9 | 6 | 62 | 9 | 14 | 5010 | 201 | 79 | 122 | 1 | 18 | 26 | 1 | 1 | 22 | 2 | 11 | 7 | 2 | 14 |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

| | |
|---|---|
| **STATE** | OKLAHOMA |
| **MAJOR BASIN** | SOUTHWEST-LOWER MISSISSIPPI RIVER |
| **MINOR BASIN** | VERDIGRIS RIVER |
| **STATION LOCATION** | VERDIGRIS RIVER AT<br>NOWATA, OKLAHOMA 109 |

| DATE SAMPLE | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 26 | 62 | - | - | - | - | - | - | - | - | 64 | 136 | 184 | 10 | - | 46 | .0 | 329 | - |
| 16 | 62 | - | - | - | - | - | - | - | - | 75 | - | - | 10 | - | 50 | .0 | 437 | - |
| 23 | 62 | - | - | - | - | - | - | - | - | 84 | - | - | 5 | - | 180 | .0 | 416 | - |
| 7 | 62 | - | - | - | - | - | - | - | - | 75 | - | - | 10 | - | 65 | .1 | 446 | - |
| 21 | 62 | - | - | - | - | - | - | - | - | 110 | 212 | 288 | 10 | - | 58 | .0 | 507 | - |
| 28 | 62 | - | - | 8.1 | - | - | - | - | - | 115 | 224 | 300 | - | 48 | 60 | .0 | 508 | - |
| 4 | 62 | 22.0 | - | 8.0 | - | - | - | - | - | 90 | 224 | 272 | 10 | 547 | 56 | .0 | 475 | - |
| 11 | 62 | - | - | 7.9 | - | - | - | - | - | - | 136 | 184 | - | 160 | - | - | - | - |
| 18 | 62 | - | - | 8.2 | - | - | - | - | - | 62 | 140 | 170 | 15 | 140 | 35 | .0 | 318 | - |
| 25 | 62 | - | - | 8.4 | - | - | - | - | - | 73 | 164 | 200 | 15 | *25 | 37 | .0 | 325 | - |
| 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 600 |
| 2 | 62 | - | - | 8.2 | - | - | - | - | - | 67 | 160 | 210 | 10 | *25 | 35 | .0 | 350 | - |
| 3 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 10 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 120 |
| 16 | 62 | - | - | 8.1 | - | - | - | - | - | - | 164 | 204 | - | 89 | - | - | - | - |
| 17 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 530 |
| 24 | 62 | 29.0 | - | 8.4 | - | - | - | - | .0 | 66 | 152 | 192 | 10 | 46 | 30 | .0 | 314 | 100 |
| 30 | 62 | 27.0 | - | 8.4 | - | - | - | - | .0 | 99 | 160 | 212 | - | 32 | 42 | .0 | 433 | - |
| 31 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *20 |
| 6 | 62 | 29.0 | - | 8.4 | - | - | - | - | .4 | 129 | 148 | 208 | 5 | 33 | 37 | .1 | 415 | - |
| 7 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 20 |
| 13 | 62 | 29.0 | - | 8.1 | - | - | - | - | .0 | 46 | 156 | 240 | 10 | 27 | 125 | .1 | 425 | - |
| 14 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 20 | 62 | - | - | - | - | - | - | - | - | 105 | 124 | 200 | 0 | - | 50 | .3 | 388 | - |
| 21 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 170 |
| 27 | 62 | - | - | - | - | - | - | - | - | 132 | 138 | 220 | 0 | - | 53 | .0 | 445 | - |
| 28 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 4 | 62 | - | - | - | - | - | - | - | - | 128 | 84 | 128 | 15 | 25 | 25 | .0 | 365 | 1000 |
| 10 | 62 | - | - | - | - | - | - | - | - | 56 | 100 | 132 | 30 | 82 | 36 | .0 | 260 | - |
| 11 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 100 |
| 18 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2800 |
| 24 | 62 | - | - | - | - | - | - | - | - | 22 | 88 | 100 | 30 | *25 | 18 | .1 | 192 | - |
| 25 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 400 |

STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Lenapah, Oklahoma
Supplied by U.S. Army Corps of Engineers

STATE Oklahoma

MAJOR BASIN Southwest-Lower Mississippi River

MINOR BASIN Verdigris River

STATION LOCATION Verdigris River at
Nowata, Oklahoma

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 11.400 | 17.900 | 7.350 | 1.520 | 5.760 | 1.040 | 1.730 | 1.690 | 1.040 | 1.440 | .079 | .044 |
| 2 | 11.600 | 15.900 | 7.150 | 1.400 | 6.050 | .685 | 1.270 | .638 | 1.170 | .788 | .082 | .049 |
| 3 | 11.300 | 21.500 | 6.350 | 1.370 | 6.550 | .615 | 1.170 | .615 | 2.150 | .570 | .069 | .283 |
| 4 | 8.650 | 24.000 | 5.670 | 1.370 | 6.750 | .638 | 1.020 | .660 | 4.920 | .450 | .062 | .097 |
| 5 | 5.440 | 26.400 | 5.490 | 1.400 | 7.050 | .788 | .760 | .454 | 2.860 | .314 | .058 | .082 |
| 6 | 3.040 | 20.700 | 5.220 | 1.740 | 7.150 | .815 | .760 | .319 | 2.420 | .214 | .054 | .166 |
| 7 | 2.260 | 2.970 | 4.020 | 2.040 | 6.340 | .735 | 1.170 | .277 | 3.650 | .176 | .112 | .142 |
| 8 | 1.390 | 2.120 | 3.200 | 1.740 | 3.970 | .735 | 1.370 | .257 | 3.860 | .372 | .119 | .250 |
| 9 | 1.020 | 3.700 | 3.560 | 1.500 | 2.490 | .685 | .898 | .214 | 3.700 | .422 | .127 | 1.140 |
| 10 | .992 | 6.950 | 6.590 | 1.300 | 1.960 | .660 | .815 | .192 | 2.820 | .347 | .092 | .334 |
| 11 | 2.450 | 7.850 | 4.980 | 1.200 | 1.740 | .660 | 1.270 | .176 | .266 | .660 | .062 | .140 |
| 12 | 8.850 | 8.180 | 2.640 | 1.100 | 1.660 | .760 | 1.040 | .166 | 2.980 | 1.390 | .055 | .079 |
| 13 | 11.200 | 9.100 | 2.640 | 1.300 | 1.740 | .788 | .815 | .154 | 3.460 | 1.400 | .076 | .056 |
| 14 | 8.530 | 13.500 | 3.600 | 1.200 | 1.630 | .870 | .710 | .142 | 3.950 | 1.100 | .062 | .046 |
| 15 | 7.500 | 12.800 | 3.440 | 1.100 | 1.550 | 1.040 | .735 | .125 | 3.950 | .898 | .049 | 5.190 |
| 16 | 6.000 | 15.100 | 3.450 | 1.100 | 1.520 | .925 | .592 | .108 | 2.880 | .685 | .038 | 3.830 |
| 17 | 7.530 | 18.000 | 6.020 | 1.000 | 1.520 | .638 | .490 | .100 | 1.300 | .615 | .031 | 3.010 |
| 18 | 8.920 | 14.500 | 6.750 | .900 | 1.820 | .530 | .470 | .094 | .815 | .550 | .024 | .955 |
| 19 | 7.980 | 3.470 | 7.250 | .900 | 2.260 | .486 | .510 | .090 | .685 | .440 | .021 | 5.750 |
| 20 | 6.880 | 3.120 | 5.130 | .900 | 2.260 | .660 | .530 | .085 | .458 | .308 | .019 | 12.900 |
| 21 | 4.790 | 5.980 | 3.600 | 1.000 | 2.260 | 2.650 | .426 | .078 | .408 | .212 | .017 | 9.810 |
| 22 | 2.140 | 13.200 | 2.880 | 1.200 | 2.120 | 7.980 | .415 | .070 | .550 | .154 | .016 | 13.400 |
| 23 | 1.440 | 10.800 | 2.640 | 1.300 | 1.890 | 4.380 | .450 | .066 | .510 | .109 | .016 | 14.100 |
| 24 | 1.230 | 5.410 | 2.490 | 1.370 | 1.740 | 3.700 | .446 | .062 | .490 | .082 | .018 | 9.880 |
| 25 | .930 | 3.280 | 2.260 | 1.440 | 1.540 | 5.160 | .408 | .058 | .570 | .073 | .027 | 6.580 |
| 26 | .960 | 5.080 | 2.190 | 2.450 | 1.440 | 6.200 | .380 | .055 | .570 | .066 | .044 | 7.730 |
| 27 | .960 | 6.450 | 2.040 | 5.680 | 1.370 | 5.900 | .371 | .052 | .570 | .059 | .041 | 8.140 |
| 28 | .930 | 7.150 | 1.960 | 9.450 | 1.300 | 5.160 | .466 | .051 | 1.210 | .062 | .043 | 8.250 |
| 29 | .930 | 7.350 | 1.890 | 7.350 |  | 4.540 | .426 | .159 | 2.260 | .079 | .050 | 8.140 |
| 30 | 2.130 | 7.350 | 1.740 | 4.730 |  | 3.220 | 2.830 | .236 | 1.960 | .075 | .049 | 11.600 |
| 31 | 13.700 |  | 1.590 | 4.700 |  | 2.420 |  | .234 |  | .070 | .043 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** INDIANA
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** WABASH RIVER
**STATION LOCATION** WABASH RIVER AT
NEW HARMONY, INDIANA 105

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 1 | 10 | 62 | 1 | 18 | 1 | 2 | 1 | 1 | 2 | 2 | 113 | 9 | 62 | 7 | 175 | 12 | | | | | | |
| 1 | 20 | 62 | 1 | 29 | 5 | 3 | 3 | 2 | 8 | 4 | 224 | 11 | 57 | 11 | 281 | 16 | | | | | | |
| 1 | 27 | 62 | 2 | 6 | 3 | 2 | 1 | 1 | 4 | 2 | 145 | 10 | 51 | 6 | 196 | 12 | | | | | | |
| 2 | 3 | 62 | 2 | 12 | 3 | 3 | 1 | 1 | 4 | 3 | 144 | 14 | 64 | 6 | 208 | 15 | | | | | | |
| 2 | 10 | 62 | 2 | 21 | 1 | 1 | 2 | 2 | 3 | 2 | 67 | 7 | 55 | 7 | 122 | 10 | | | | | | |
| 2 | 17 | 62 | 2 | 26 | 0 | 1 | 0 | 2 | 0 | 2 | 30 | 10 | 35 | 10 | 65 | 14 | | | | | | |
| 2 | 24 | 62 | 3 | 6 | 3 | 5 | 0 | 2 | 3 | 5 | 202 | 17 | 54 | 16 | 256 | 23 | | | | | | |
| 3 | 3 | 62 | 3 | 15 | 3 | 3 | 1 | 1 | 4 | 3 | 208 | 11 | 50 | 6 | 258 | 12 | | | | | | |
| 3 | 10 | 62 | 3 | 20 | 0 | 1 | 0 | 1 | 0 | 1 | 90 | 9 | 56 | 8 | 146 | 12 | | | | | | |
| 3 | 17 | 62 | 3 | 30 | 2 | 2 | 0 | 1 | 2 | 2 | 133 | 8 | 69 | 7 | 202 | 11 | | | | | | |
| 3 | 24 | 62 | 4 | 4 | 7 | 5 | 0 | 1 | 7 | 5 | 245 | 13 | 60 | 15 | 305 | 20 | | | | | | |
| 3 | 31 | 62 | 4 | 16 | 3 | 2 | 1 | 1 | 4 | 2 | 101 | 8 | 57 | 7 | 158 | 11 | | | | | | |
| 4 | 7 | 62 | 4 | 18 | 10 | 6 | 1 | 1 | 11 | 7 | 84 | 11 | 33 | 6 | 117 | 13 | | | | | | |
| 4 | 14 | 62 | 4 | 25 | 7 | 8 | 1 | 2 | 8 | 8 | 37 | 6 | 144 | 20 | 181 | 21 | | | | | | |
| 4 | 21 | 62 | 5 | 23 | 2 | 2 | 0 | 1 | 2 | 2 | 8 | 18 | 53 | 18 | 61 | 25 | | | | | | |
| 5 | 5 | 62 | 6 | 11 | 1 | 2 | 1 | 1 | 2 | 2 | 51 | 11 | 25 | 9 | 76 | 14 | | | | | | |
| 5 | 12 | 62 | 6 | 15 | 10 | 6 | 0 | 0 | 10 | 6 | 70 | 12 | 41 | 8 | 111 | 14 | | | | | | |
| 5 | 19 | 62 | 7 | 27 | 4 | 4 | 1 | 2 | 5 | 4 | 56 | 6 | 31 | 5 | 87 | 8 | | | | | | |
| 5 | 26 | 62 | 7 | 2 | 20 | 13 | 2 | 2 | 22 | 13 | 260 | 52 | 34 | 14 | 294 | 54 | | | | | | |
| 6 | 3 | 62 | 7 | 2 | 0 | 4 | 0 | 2 | 0 | 4 | 90 | 17 | 35 | 8 | 125 | 19 | | | | | | |
| 6 | 9 | 62 | 7 | 5 | 1 | 2 | 0 | 1 | 1 | 2 | 30 | 14 | 35 | 15 | 65 | 21 | | | | | | |
| 6 | 16 | 62 | 7 | 12 | 19 | 22 | 0 | 2 | 19 | 22 | 407 | 106 | 33 | 10 | 440 | 106 | | | | | | |
| 6 | 25 | 62 | 7 | 18 | 32 | 18 | 0 | 1 | 32 | 18 | 371 | 82 | 42 | 8 | 413 | 82 | | | | | | |
| 6 | 30 | 62 | 7 | 25 | 1 | 1 | 2 | 2 | 3 | 2 | 14 | 13 | 19 | 14 | 33 | 19 | | | | | | |
| 7 | 11 | 62 | 8 | 6 | 1 | 1 | 2 | 1 | 3 | 1 | 9 | 7 | 26 | 9 | 35 | 11 | | | | | | |
| 7 | 16 | 62 | 8 | 14 | 1 | 1 | 0 | 1 | 1 | 1 | 19 | 12 | 30 | 13 | 49 | 18 | | | | | | |
| 7 | 23 | 62 | 8 | 7 | 7 | 4 | 0 | 0 | 7 | 4 | 53 | 11 | 43 | 8 | 96 | 14 | | | | | | |
| 7 | 28 | 62 | 8 | 21 | 1 | 1 | 0 | 1 | 1 | 1 | 125 | 10 | 49 | 11 | 174 | 15 | | | | | | |
| 8 | 4 | 62 | 8 | 15 | 6 | 4 | 1 | 2 | 7 | 4 | 60 | 18 | 19 | 13 | 79 | 22 | | | | | | |
| 8 | 11 | 62 | 10 | 8 | 3 | 2 | 0 | 1 | 3 | 2 | 16 | 27 | 18 | 9 | 34 | 28 | | | | | | |
| 8 | 18 | 62 | 8 | 31 | 0 | 4 | 0 | 1 | 0 | 4 | 51 | 64 | 14 | 8 | 65 | 64 | | | | | | |
| 8 | 27 | 62 | 9 | 6 | 3 | 2 | 0 | 2 | 3 | 3 | 25 | 14 | 23 | 13 | 48 | 19 | | | | | | |
| 9 | 8 | 62 | 9 | 21 | 1 | 1 | 1 | 2 | 2 | 2 | 14 | 14 | 20 | 16 | 34 | 21 | | | | | | |
| 9 | 15 | 62 | 10 | 2 | 1 | 1 | 0 | 1 | 1 | 1 | 15 | 8 | 36 | 10 | 51 | 13 | | | | | | |
| 9 | 22 | 62 | 10 | 15 | 5 | 4 | 0 | 1 | 5 | 4 | 37 | 30 | 25 | 8 | 62 | 31 | | | | | | |

# PLANKTON POPULATION

**MINOR BASIN** WABASH RIVER

**STATION LOCATION** WABASH RIVER AT
NEW HARMONY, INDIANA

| DATE OF SAMPLE | | | | ALGAE *(Number per milliliter)* | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | TOTAL | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 1 | 10 | 62 | 4200 | 0 | 70 | 140 | 0 | 380 | 20 | 1190 | 2410 | 740 | 470 | 82 | 3 | 92 | 1 | 87 | 1 | 51 | 1 | | | | | | | | | | | | |
| 1 | 22 | 62 | 1300 | 50 | 20 | 50 | 0 | 90 | 0 | 500 | 590 | 290 | 200 | 68 | 2 | 92 | 1 | | | | | | | | | | | | | | | | |
| 2 | 6 | 62 | 500 | 0 | 20 | 0 | 0 | 20 | 0 | 340 | 90 | 870 | 380 | 71 | 1 | 68 | 1 | | | | | | | | | | | | | | | | |
| 2 | 10 | 62 | 1400 | 160 | 140 | 110 | 0 | 340 | 0 | 230 | 470 | 140 | 180 | 51 | 1 | | | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 1300 | 20 | 0 | 20 | 0 | 210 | 0 | 410 | 680 | 80 | 80 | | | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 300 | 0 | 0 | 20 | 0 | 0 | 0 | 130 | 110 | 600 | 160 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 500 | 0 | 0 | 0 | 0 | 20 | 20 | 200 | 290 | 110 | 160 | | | | | | | | | | | | | | | | | | | | |
| 4 | 3 | 62 | 2200 | 0 | 0 | 40 | 0 | 370 | 170 | 1180 | 390 | 150 | 20 | 68 | 3 | 71 | 2 | 51 | 1 | | | | | | | | | | | | | | |
| 4 | 17 | 62 | 73200 | 180 | 20 | 790 | 0 | 3170 | 200 | 61210 | 7510 | 3890 | 630 | 71 | 9 | 88 | 5 | 92 | 4 | 68 | 4 | 57 | 4 | 51 | 4 | 69 | 2 | 34 | 2 | 25 | 1 | 87 | 1 |
| 5 | 1 | 62 | 79800 | 2070 | 250 | 18420 | 210 | 3520 | 750 | 50430 | 4180 | 28240 | 750 | 71 | 9 | 34 | 5 | 24 | 5 | 51 | 5 | 3 | 4 | 32 | 4 | 57 | 3 | 30 | 3 | 60 | 3 | 92 | 3 |
| 5 | 17 | 62 | 6700 | 20 | 210 | 420 | 230 | 740 | 0 | 3170 | 1900 | 3550 | 1940 | 71 | 5 | 57 | 3 | 88 | 2 | 50 | 1 | 17 | 1 | 92 | 1 | 24 | 1 | 68 | 1 | 82 | 1 | | |
| 5 | 29 | 62 | 18600 | 0 | 0 | 2660 | 930 | 250 | 0 | 13590 | 1180 | 10000 | 1440 | 68 | 6 | 71 | 5 | 24 | 4 | 50 | 3 | 38 | 2 | 30 | 1 | 91 | 1 | 88 | 1 | 85 | 1 | 35 | 1 |
| 6 | 2 | 62 | 5300 | 0 | 0 | 540 | 40 | 370 | 80 | 2260 | 1970 | 1300 | 500 | 68 | 4 | 71 | 3 | 88 | 2 | 87 | 2 | 92 | 2 | 24 | 2 | 51 | 1 | | | | | | |
| 6 | 25 | 62 | 1100 | 20 | 0 | 40 | 0 | 150 | 20 | 370 | 480 | 440 | 60 | 68 | 1 | 88 | 1 | | | | | | | | | | | | | | | | |
| 7 | 10 | 62 | 9200 | 40 | 0 | 360 | 0 | 40 | 0 | 6080 | 2700 | 4350 | 1650 | 68 | 5 | 71 | 3 | 88 | 3 | 87 | 3 | 69 | 2 | 92 | 2 | 86 | 1 | 79 | 1 | 82 | 1 | 85 | 1 |
| 7 | 23 | 62 | 7100 | 0 | 0 | 170 | 0 | 110 | 0 | 5700 | 1140 | 1140 | 760 | 68 | 5 | 67 | 2 | 69 | 2 | 87 | 1 | 88 | 1 | 92 | 1 | 38 | 1 | | | | | | |
| 8 | 6 | 62 | 29900 | 410 | 0 | 3110 | * | 1080 | 170 | 19750 | 2280 | 3560 | 120 | 68 | 7 | 50 | 5 | 24 | 4 | 92 | 4 | 69 | 3 | 51 | 3 | 38 | 3 | 88 | 2 | 25 | 2 | 71 | 1 |
| 8 | 21 | 62 | 38000 | 290 | 40 | 9560 | 80 | 1570 | 0 | 22770 | 3730 | 7870 | 790 | 68 | 8 | 24 | 6 | 71 | 5 | 88 | 4 | 51 | 3 | 38 | 3 | 25 | 2 | 40 | 2 | 32 | 2 | 35 | 2 |
| 9 | 4 | 62 | 13400 | 320 | 0 | 3510 | 0 | 70 | 50 | 8620 | 790 | 4950 | 740 | 68 | 6 | 24 | 4 | 38 | 3 | 3 | 2 | 25 | 2 | 71 | 1 | | | | | | | | |
| 9 | 18 | 62 | 17600 | 250 | 80 | 2030 | 410 | 660 | 250 | 10470 | 3400 | 5420 | 1040 | 68 | 6 | 69 | 4 | 87 | 4 | 24 | 3 | 71 | 3 | 88 | 3 | 51 | 3 | 50 | 2 | 38 | 2 | 60 | 1 |
| *8 | 6 | 62 | | | | | 3100 | | | | | | | | | | | | | | | | | | | | | | | | | | |

# PLANKTON POPULATION

**STATE** INDIANA
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** WABASH RIVER
**STATION LOCATION** WABASH RIVER AT
NEW HARMONY, INDIANA 105

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 1 | 10 | 62 | 36 | 38 | 92 | 16 | 71 | 6 | 21 | 3 | 37 | 250 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 22 | 62 | 92 | 26 | 26 | 16 | 21 | 8 | 36 | 8 | 42 | 340 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 6 | 62 | | | | | | | | | | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 10 | 62 | | | | | | | | | | 200 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 210 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 26 | 24 | 82 | 18 | 92 | 16 | 36 | 5 | 37 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 26 | 12 | 82 | 10 | 86 | 8 | 65 | 7 | 63 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 3 | 62 | 26 | 12 | 86 | 11 | 92 | 10 | 36 | 8 | 59 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 17 | 62 | 82 | 35 | 91 | 12 | 67 | 11 | 80 | 5 | 37 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 1 | 62 | 82 | 72 | 92 | 8 | 36 | 3 | 26 | 3 | 14 | 700 | 0 | 21 | 21 | 1 | 11 | 1 | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 17 | 62 | 82 | 21 | 71 | 16 | 92 | 11 | 36 | 7 | 45 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 29 | 62 | 26 | 29 | 82 | 21 | 23 | 15 | 30 | 6 | 29 | 0 | 0 | 25 | 22 | 2 | 11 | 1 | | | | | | | 1 | | | | | | | 0 | 1 |
| 6 | 2 | 62 | 26 | 15 | 82 | 12 | 92 | 9 | 23 | .7 | 57 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 25 | 62 | 26 | 27 | 82 | 18 | 86 | 10 | 71 | 5 | 40 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 10 | 62 | 26 | 24 | 82 | 12 | 58 | 11 | 23 | 10 | 43 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 23 | 62 | 26 | 37 | 82 | 6 | 92 | 6 | 20 | 6 | 45 | 0 | 0 | – | | | | | | | | | | | – | | | | | | | – | – |
| 8 | 21 | 62 | 26 | 69 | 82 | 11 | 23 | 9 | 27 | 7 | 4 | 0 | 0 | 116 | 22 | 3 | 2 | 3 | 17 | 3 | 11 | 2 | 15 | 2 | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 26 | 57 | 58 | 16 | 30 | 9 | 89 | 4 | 14 | 0 | 0 | 1590 | 22 | 8 | 21 | 4 | 2 | 3 | 15 | 3 | 11 | 2 | 0 | | | | | | | 0 | 0 |
| 9 | 4 | 62 | 26 | 94 | 82 | 4 | 23 | 1 | 70 | 1 | | 0 | 0 | 216 | 22 | 6 | 2 | 3 | | | | | | | 0 | | | | | | | 0 | 1 |
| 9 | 18 | 62 | 26 | 74 | 82 | 10 | 65 | 3 | 23 | 2 | 11 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** INDIANA
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** WABASH RIVER
**STATION LOCATION** WABASH RIVER AT
NEW HARMONY, INDIANA 105

| DATE OF SAMPLE | | | | | | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | GALLONS FILTERED | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 4 | 2 | 62 | 4 | 9 | 4663 | 123 | 51 | 72 | 1 | 10 | 28 | 4 | 2 | 22 | 0 | 5 | 3 | 1 | 3 |
| 4 | 30 | 62 | 5 | 6 | 4399 | 170 | 69 | 101 | 9 | 16 | 24 | 2 | 2 | 19 | 1 | 8 | 5 | 1 | 6 |
| 6 | 3 | 62 | 6 | 12 | 6121 | 89 | 33 | 56 | 1 | 8 | 11 | 1 | 1 | 9 | 0 | 4 | 2 | 1 | 6 |
| 7 | 10 | 62 | 7 | 18 | 5253 | 114 | 47 | 67 | 0 | 9 | 16 | 1 | 1 | 13 | 1 | 6 | 4 | 1 | 11 |
| 8 | 4 | 62 | 8 | 11 | 4765 | 123 | 45 | 78 | 1 | 9 | 15 | 2 | 1 | 11 | 1 | 5 | 3 | 1 | 11 |
| 9 | 8 | 62 | 9 | 15 | 4813 | 126 | 50 | 76 | 1 | 12 | 18 | 1 | 1 | 15 | 1 | 7 | 3 | 1 | 8 |

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** INDIANA
**MAJOR BASIN** OHIO RIVER
**MINOR BASIN** WABASH RIVER
**STATION LOCATION** WABASH RIVER AT
NEW HARMONY, INDIANA 105

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 1 | 9 | 62 | .0 | - | 8.2 | 1.8 | - | - | - | - | 15 | 140 | 210 | 10 | 300 | 38 | - | - | - |
| 1 | 22 | 62 | 1.0 | 12.6 | 8.2 | - | - | - | - | - | 9 | - | 132 | 10 | 400 | 50 | - | - | - |
| 1 | 24 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2600 |
| 2 | 5 | 62 | 3.0 | 11.6 | 7.7 | 2.4 | - | - | - | - | 8 | 100 | 150 | 20 | 200 | 30 | - | 198 | - |
| 2 | 7 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 16000 |
| 2 | 19 | 62 | 3.0 | 11.2 | - | 2.0 | - | - | - | - | 16 | 170 | 244 | 5 | 100 | 54 | - | - | - |
| 2 | 20 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 9000 |
| 3 | 5 | 62 | 3.0 | 12.0 | 8.0 | 2.8 | - | - | - | - | 9 | 86 | 136 | 15 | 200 | 30 | - | 127 | 2600 |
| 3 | 19 | 62 | 6.0 | 11.0 | 8.2 | 2.1 | - | - | - | - | 10 | 112 | 170 | 20 | 75 | 43 | - | 253 | - |
| 4 | 3 | 62 | 9.0 | 10.2 | 8.2 | 2.0 | - | - | - | - | 12 | 152 | 222 | 5 | 75 | 49 | - | 290 | 3000 |
| 4 | 17 | 62 | 9.0 | 11.5 | 8.2 | 3.3 | 49 | - | - | - | 15 | 187 | 255 | 5 | 40 | 24 | - | - | 4000 |
| 5 | 1 | 62 | 20.0 | 9.0 | 8.2 | 5.4 | - | - | - | - | 19 | 190 | 268 | 5 | 30 | 38 | - | 334 | 1200 |
| 5 | 17 | 62 | 23.0 | 6.0 | 8.2 | 5.1 | 50 | - | - | - | 12 | 147 | 222 | 15 | 300 | 50 | - | 301 | - |
| 5 | 26 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .1 | - | - |
| 6 | 9 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 6 | 12 | 62 | - | 6.8 | 8.1 | 2.5 | 39 | - | - | - | 16 | 176 | 266 | 5 | 500 | 50 | - | 377 | 22000 |
| 6 | 25 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 15000 |
| 6 | 26 | 62 | - | 6.8 | 8.0 | 4.8 | - | - | - | - | 26 | 136 | 202 | 10 | 700 | 50 | - | 301 | - |
| 7 | 10 | 62 | 20.0 | 5.0 | 8.0 | 2.2 | - | - | - | - | 13 | 136 | 200 | 15 | 270 | 95 | - | 304 | - |
| 7 | 16 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .5 | - | - |
| 7 | 23 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 7 | 24 | 62 | 20.0 | 6.7 | 8.1 | 4.4 | 23 | - | - | - | 10 | 140 | 204 | 20 | 320 | 43 | - | - | - |
| 7 | 28 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 8 | 4 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 8 | 6 | 62 | 20.0 | 7.9 | 8.6 | 3.8 | - | - | - | - | 14 | 194 | 260 | 10 | 50 | 55 | - | 319 | 14000 |
| 8 | 11 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 8 | 21 | 62 | 31.0 | - | 8.4 | 3.0 | 74 | - | - | - | 21 | 170 | 278 | 20 | 30 | 86 | .4 | 353 | 3000 |
| 8 | 27 | 62 | - | - | - | - | - | - | - | - | - | - | - | 5 | 85 | - | .0 | - | - |
| 9 | 4 | 62 | 25.0 | 9.0 | 8.2 | 5.0 | - | - | - | - | 25 | 168 | 256 | 10 | 60 | 98 | .4 | 328 | - |
| 9 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 7000 |
| 9 | 8 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 9 | 15 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .1 | - | - |
| 9 | 18 | 62 | 23.0 | 5.0 | 8.0 | 4.7 | - | - | - | - | 17 | 134 | 208 | 10 | 250 | 78 | .2 | 277 | 1000 |

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Mount Carmel, Illinois
Operated by U.S. Geological Survey

MAJOR BASIN Ohio River

MINOR BASIN Wabash River

STATION LOCATION Wabash River at
New Harmony, Indiana

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 9.900 | 7.140 | 14.600 | 12.500 | 74.100 | 77.700 | 93.000 | 16.000 | 18.500 | 9.240 | 19.200 | 7.200 |
| 2 | 9.760 | 7.420 | 13.400 | 11.300 | 76.800 | 83.400 | 81.700 | 27.000 | 18.200 | 8.780 | 17.400 | 8.360 |
| 3 | 9.440 | 7.590 | 12.400 | 11.000 | 80.100 | 89.400 | 72.300 | 34.200 | 17.700 | 8.920 | 15.400 | 8.640 |
| 4 | 9.020 | 7.450 | 11.700 | 11.300 | 82.800 | 96.500 | 64.400 | 36.800 | 16.400 | 8.460 | 13.700 | 8.360 |
| 5 | 8.640 | 7.620 | 11.300 | 12.000 | 82.800 | 102.000 | 56.600 | 35.900 | 15.500 | 10.700 | 12.500 | 8.220 |
| 6 | 8.120 | 8.640 | 11.500 | 14.800 | 76.400 | 107.000 | 50.000 | 32.300 | 14.400 | 19.200 | 11.600 | 8.920 |
| 7 | 7.660 | 8.920 | 11.500 | 23.600 | 69.200 | 108.000 | 44.000 | 28.000 | 14.200 | 22.200 | 13.900 | 9.970 |
| 8 | 7.280 | 9.160 | 11.800 | 29.400 | 64.100 | 102.000 | 40.600 | 25.500 | 15.400 | 20.500 | 14.400 | 10.700 |
| 9 | 6.920 | 8.990 | 12.400 | 34.000 | 61.000 | 91.600 | 39.800 | 23.000 | 17.300 | 17.500 | 14.900 | 9.520 |
| 10 | 6.640 | 8.500 | 12.500 | 38.300 | 59.000 | 80.600 | 40.700 | 22.000 | 19.100 | 14.700 | 13.400 | 8.570 |
| 11 | 6.440 | 8.040 | 12.800 | 42.200 | 56.600 | 72.200 | 39.400 | 24.700 | 20.000 | 12.700 | 11.700 | 7.700 |
| 12 | 6.130 | 7.660 | 13.400 | 40.200 | 53.100 | 69.000 | 37.400 | 34.900 | 24.600 | 11.800 | 10.600 | 7.170 |
| 13 | 5.950 | 7.280 | 15.600 | 31.000 | 46.600 | 70.400 | 35.200 | 40.500 | 30.700 | 11.100 | 9.900 | 7.170 |
| 14 | 5.680 | 7.030 | 17.600 | 23.800 | 39.300 | 72.200 | 33.100 | 42.100 | 34.000 | 10.500 | 9.060 | 7.560 |
| 15 | 5.650 | 6.890 | 16.600 | 23.900 | 34.400 | 73.500 | 31.200 | 41.800 | 31.200 | 13.100 | 8.430 | 10.600 |
| 16 | 5.620 | 7.480 | 15.300 | 29.600 | 32.100 | 74.300 | 29.100 | 37.600 | 25.600 | 24.200 | 7.870 | 14.400 |
| 17 | 5.680 | 7.900 | 16.100 | 37.400 | 30.900 | 74.400 | 26.700 | 31.800 | 21.500 | 34.000 | 7.450 | 16.000 |
| 18 | 5.860 | 9.100 | 18.800 | 40.400 | 30.000 | 74.000 | 24.800 | 26.700 | 19.200 | 42.200 | 7.100 | 14.300 |
| 19 | 5.950 | 10.400 | 21.000 | 41.100 | 28.600 | 71.500 | 23.400 | 23.000 | 17.200 | 49.600 | 6.820 | 12.300 |
| 20 | 5.860 | 11.900 | 22.800 | 40.200 | 28.200 | 68.000 | 22.200 | 20.400 | 15.200 | 54.500 | 6.580 | 9.900 |
| 21 | 5.740 | 14.500 | 24.500 | 37.800 | 29.100 | 68.600 | 21.000 | 18.600 | 13.700 | 57.300 | 6.340 | 8.680 |
| 22 | 5.650 | 15.300 | 25.200 | 46.000 | 30.600 | 70.700 | 20.000 | 17.400 | 12.200 | 54.500 | 6.190 | 8.150 |
| 23 | 5.530 | 14.700 | 23.900 | 55.000 | 32.800 | 72.800 | 19.100 | 16.300 | 14.200 | 43.900 | 6.040 | 7.620 |
| 24 | 5.530 | 15.000 | 22.800 | 55.900 | 39.500 | 77.600 | 18.400 | 15.400 | 15.200 | 36.700 | 5.950 | 7.310 |
| 25 | 5.650 | 15.400 | 22.900 | 55.200 | 46.800 | 83.900 | 17.700 | 15.300 | 12.600 | 35.100 | 6.040 | 7.100 |
| 26 | 5.650 | 16.300 | 22.100 | 55.000 | 53.800 | 93.800 | 17.200 | 15.300 | 11.600 | 35.400 | 5.890 | 6.890 |
| 27 | 5.770 | 17.700 | 20.400 | 57.500 | 62.800 | 106.000 | 16.600 | 14.900 | 12.000 | 36.000 | 6.100 | 6.470 |
| 28 | 6.190 | 18.100 | 19.200 | 65.400 | 71.200 | 116.000 | 16.000 | 14.700 | 11.600 | 35.400 | 6.470 | 6.160 |
| 29 | 6.190 | 17.400 | 18.000 | 69.400 |  | 122.000 | 15.500 | 15.700 | 10.700 | 30.700 | 6.890 | 6.040 |
| 30 | 6.220 | 16.000 | 16.400 | 71.400 |  | 120.000 | 15.200 | 17.600 | 10.100 | 24.800 | 7.100 | 5.890 |
| 31 | 6.540 |  | 14.400 | 72.500 |  | 109.000 |  | 18.300 |  | 21.200 | 6.960 |  |

**STATION LOCATION** WILLAMETTE RIVER AT
PORTLAND, OREGON 124

| DATE SAMPLE TAKEN | | | DATE OF DETERMINATION | | RADIOACTIVITY IN WATER | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 8 | 14 | 62 | 8 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 2 | 5 | 3 | 7 | | | | | | |
| 8 | 28 | 62 | 9 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 | 1 | 8 | 5 | 10 | | | | | | |
| 9 | 7 | 62 | 9 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 8 | 5 | 11 | 6 | | | | | | |
| 9 | 14 | 62 | 10 | 8 | 1 | 1 | 0 | 0 | 1 | 1 | 5 | 4 | 1 | 5 | 6 | 6 | | | | | | |

**STATION LOCATION** WILLAMETTE RIVER AT

PORTLAND, OREGON 124

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 8 | 14 | 62 | 2300 | 0 | 0 | 310 | 0 | 230 | 660 | 810 | 330 | 210 | 250 | 69 | 3 | 60 | 2 | 51 | 1 | | | | | | | | | | | | | | |
| 9 | 7 | 62 | 1700 | 0 | 0 | 250 | 0 | 80 | 0 | 890 | 510 | 250 | 550 | 71 | 2 | 69 | 1 | 92 | 1 | 77 | 1 | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS *(See text for Codes)* | | | | | | | | | FUNGI AND SHEATHED BACTERIA *Number per ml.* | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA *(Identifiable) Number per ml.* | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES *(Identifiable) Number per liter* | OTHER ANIMAL FORMS *(Number per liter)* |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL *(See text for Codes)* | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 8 | 14 | 62 | 47 | 34 | 58 | 24 | 82 | 15 | 9 | 7 | 20 | 0 | 0 | 310 | 17 | 5 | 11 | 5 | 21 | 4 | 22 | 2 | | | 12 | 50 | 3 | | | | | 0 | 0 |
| 9 | 7 | 62 | 58 | 31 | 82 | 20 | 92 | 18 | 47 | 6 | 25 | 0 | 0 | 151 | 17 | 4 | 11 | 3 | 22 | 3 | 21 | 3 | 12 | 1 | 24 | 53 | 3 | 76 | 2 | 50 | 1 | 0 | 0 |

**NATIONAL WATER QUALITY NETWORK**

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** OREGON

**MAJOR BASIN** PACIFIC NORTHWEST

**MINOR BASIN** WILLAMETTE RIVER

**STATION LOCATION** WILLAMETTE RIVER AT
PORTLAND, OREGON 124

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 8 | 14 | 62 | - | - | - | - | - | - | - | - | 4 | 32 | 36 | 10 | - | 4 | .0 | 36 | 710 |
| 8 | 28 | 62 | - | - | - | - | - | - | - | - | 4 | 32 | 28 | 10 | - | 7 | .0 | 33 | 1100 |
| 9 | 7 | 62 | 19.8 | 4.7 | 6.8 | 2.1 | - | - | - | - | 6 | 32 | 52 | 10 | 25 | 7 | .0 | 80 | *10 |
| 9 | 14 | 62 | 20.4 | 3.3 | - | 1.8 | - | - | - | - | 5 | 36 | 40 | 10 | *25 | 7 | .0 | 80 | - |

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Salem, Oregon
Data Supplied by U.S. Geological Survey

MINOR BASIN Willamette River

STATION LOCATION Willamette River at Portland, Oregon

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 6.100 | 14.600 | 53.500 | 43.200 | 13.900 | 16.700 | 41.600 | 33.600 | 19.000 | 8.030 | 5.700 | 5.700 |
| 2 | 5.900 | 13.900 | 58.300 | 40.000 | 13.200 | 16.400 | 38.000 | 32.000 | 17.800 | 7.740 | 5.700 | 5.700 |
| 3 | 5.900 | 13.900 | 54.100 | 38.800 | 12.900 | 18.200 | 33.900 | 31.200 | 17.800 | 7.450 | 5.900 | 5.900 |
| 4 | 6.850 | 19.600 | 44.900 | 47.400 | 12.500 | 19.900 | 32.000 | 40.800 | 18.000 | 7.200 | 6.350 | 5.900 |
| 5 | 6.850 | 19.500 | 41.100 | 47.700 | 12.000 | 22.800 | 28.700 | 43.800 | 17.400 | 6.950 | 7.100 | 5.700 |
| 6 | 7.500 | 17.600 | 44.900 | 46.000 | 11.500 | 25.800 | 32.000 | 40.500 | 16.600 | 6.700 | 7.100 | 6.100 |
| 7 | 7.850 | 15.600 | 38.800 | 48.500 | 12.200 | 28.400 | 37.500 | 36.400 | 15.900 | 6.450 | 6.850 | 5.900 |
| 8 | 8.150 | 14.200 | 34.500 | 50.800 | 14.400 | 28.700 | 43.500 | 32.800 | 14.600 | 6.200 | 7.100 | 6.100 |
| 9 | 8.150 | 13.200 | 31.700 | 47.900 | 16.000 | 26.000 | 53.200 | 32.200 | 14.800 | 5.980 | 7.850 | 5.900 |
| 10 | 8.450 | 11.800 | 27.800 | 44.900 | 19.600 | 25.000 | 50.200 | 35.000 | 15.000 | 6.200 | 7.850 | 5.900 |
| 11 | 10.600 | 11.800 | 25.800 | 36.400 | 25.300 | 23.800 | 45.400 | 35.600 | 14.800 | 5.980 | 7.350 | 6.350 |
| 12 | 11.500 | 12.900 | 20.600 | 31.400 | 23.300 | 22.800 | 38.300 | 35.600 | 14.200 | 5.980 | 7.100 | 7.850 |
| 13 | 11.500 | 13.900 | 21.000 | 29.200 | 21.000 | 26.000 | 34.400 | 33.400 | 13.600 | 5.760 | 6.600 | 8.750 |
| 14 | 13.200 | 13.200 | 19.200 | 26.800 | 27.700 | 19.000 | 30.300 | 29.500 | 13.200 | 5.760 | 6.600 | 8.450 |
| 15 | 10.900 | 13.600 | 23.800 | 25.000 | 36.100 | 18.000 | 30.000 | 26.600 | 12.800 | 5.980 | 6.350 | 7.600 |
| 16 | 9.050 | 13.200 | 28.400 | 24.600 | 32.800 | 17.600 | 28.700 | 23.800 | 12.200 | 5.980 | 5.700 | 6.850 |
| 17 | 8.750 | 12.900 | 33.900 | 22.800 | 29.500 | 17.600 | 25.800 | 21.900 | 11.800 | 5.980 | 5.900 | 6.600 |
| 18 | 10.600 | 11.800 | 51.700 | 22.800 | 33.100 | 17.400 | 24.800 | 19.200 | 11.500 | 5.760 | 5.900 | 6.850 |
| 19 | 11.200 | 9.950 | 59.700 | 22.800 | 33.100 | 17.200 | 24.600 | 18.000 | 11.500 | 5.760 | 5.900 | 7.350 |
| 20 | 10.800 | 9.350 | 98.000 | 20.800 | 27.900 | 17.200 | 24.300 | 17.000 | 11.100 | 5.760 | 6.100 | 6.350 |
| 21 | 10.800 | 9.650 | 121.000 | 17.800 | 23.800 | 18.200 | 21.700 | 17.000 | 10.800 | 5.760 | 6.100 | 6.350 |
| 22 | 10.300 | 9.950 | 132.000 | 15.600 | 19.900 | 20.100 | 19.200 | 17.200 | 10.400 | 5.760 | 6.100 | 7.350 |
| 23 | 8.750 | 49.900 | 110.000 | 13.300 | 18.400 | 24.600 | 18.200 | 17.200 | 10.100 | 5.760 | 5.900 | 6.850 |
| 24 | 10.900 | 76.800 | 89.000 | 13.400 | 18.000 | 27.400 | 17.600 | 17.600 | 9.800 | 5.540 | 5.900 | 6.350 |
| 25 | 13.600 | 56.500 | 81.000 | 13.200 | 16.800 | 47.400 | 16.800 | 17.600 | 9.800 | 5.320 | 5.900 | 6.600 |
| 26 | 12.500 | 67.400 | 77.400 | 13.400 | 15.300 | 89.300 | 16.200 | 21.900 | 9.500 | 5.320 | 5.900 | 6.850 |
| 27 | 12.200 | 80.800 | 70.000 | 14.200 | 14.100 | 110.000 | 19.400 | 27.900 | 9.800 | 5.320 | 5.900 | 6.600 |
| 28 | 18.800 | 59.000 | 63.900 | 13.900 | 14.000 | 110.000 | 43.000 | 26.600 | 9.500 | 5.320 | 5.900 | 6.600 |
| 29 | 25.300 | 60.400 | 59.400 | 14.400 |  | 91.200 | 44.600 | 24.800 | 8.900 | 5.320 | 5.900 | 7.600 |
| 30 | 20.100 | 54.100 | 55.300 | 14.200 |  | 67.200 | 38.600 | 21.400 | 8.320 | 5.320 | 5.900 | 8.450 |
| 31 | 16.800 |  | 48.500 | 14.200 |  | 51.400 |  | 19.900 |  | 5.320 | 5.700 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** WASHINGTON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** YAKIMA RIVER
**STATION LOCATION** YAKIMA RIVER AT
RICHLAND, WASHINGTON

89

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 13 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 5 | 6 | 7 | 6 | 9 | | | | | | |
| 10 | 9 | 61 | 10 | 26 | 0 | 0 | 1 | 1 | 1 | 1 | 3 | 4 | 14 | 6 | 17 | 7 | | | | | | |
| 10 | 16 | 61 | 10 | 31 | 0 | 1 | 0 | 1 | 0 | 1 | 21 | 5 | 35 | 6 | 56 | 8 | | | | | | |
| 10 | 22 | 61 | 11 | 1 | 0 | 1 | 2 | 2 | 2 | 2 | 6 | 4 | 23 | 7 | 29 | 8 | | | | | | |
| 10 | 30 | 61 | 11 | 7 | 0 | 1 | 3 | 2 | 3 | 2 | 3 | 5 | 12 | 7 | 15 | 9 | | | | | | |
| 11 | 6 | 61 | 11 | 16 | 0 | 0 | 4 | 2 | 4 | 2 | 1 | 4 | 9 | 6 | 10 | 7 | | | | | | |
| 11 | 13 | 61 | 11 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 5 | 10 | 7 | 15 | 9 | | | | | | |
| 11 | 20 | 61 | 12 | 4 | 0 | 1 | 3 | 1 | 3 | 1 | 2 | 4 | 7 | 5 | 9 | 6 | | | | | | |
| 11 | 27 | 61 | 12 | 6 | 0 | 0 | 2 | 1 | 2 | 1 | 1 | 5 | 13 | 7 | 14 | 9 | | | | | | |
| 12 | 4 | 61 | 12 | 12 | 0 | 1 | 2 | 1 | 2 | 1 | 7 | 5 | 8 | 7 | 15 | 9 | | | | | | |
| 12 | 18 | 61 | 12 | 28 | 0 | 0 | 2 | 1 | 2 | 1 | 11 | 4 | 19 | 6 | 30 | 7 | | | | | | |
| 1 | 2 | 62 | 1 | 12 | 0 | 1 | 0 | 1 | 0 | 1 | 11 | 4 | 11 | 5 | 22 | 6 | | | | | | |
| 1 | 8 | 62 | 1 | 25 | – | – | – | – | – | – | 8 | 6 | 9 | 6 | 17 | 9 | | | | | | |
| 1 | 15 | 62 | 1 | 24 | 0 | 1 | 0 | 1 | 0 | 1 | 7 | 6 | 12 | 6 | 19 | 8 | | | | | | |
| 1 | 22 | 62 | 1 | 31 | 0 | 1 | 1 | 1 | 1 | 1 | 11 | 5 | 8 | 5 | 19 | 7 | | | | | | |
| 1 | 29 | 62 | 2 | 8 | 1 | 1 | 1 | 1 | 2 | 1 | 6 | 5 | 9 | 5 | 15 | 7 | | | | | | |
| 2 | 5 | 62 | 2 | 15 | 0 | 1 | 0 | 1 | 0 | 1 | 16 | 5 | 10 | 5 | 26 | 7 | | | | | | |
| 2 | 12 | 62 | 2 | 21 | 0 | 1 | 1 | 1 | 1 | 1 | 16 | 4 | 11 | 5 | 27 | 6 | | | | | | |
| 2 | 19 | 62 | 3 | 5 | 0 | 1 | 2 | 1 | 2 | 1 | 5 | 4 | 12 | 8 | 17 | 9 | | | | | | |
| 2 | 26 | 62 | 3 | 12 | 0 | 0 | 1 | 1 | 1 | 1 | 5 | 4 | 10 | 5 | 15 | 6 | | | | | | |
| 3 | 5 | 62 | 3 | 15 | 0 | 1 | 1 | 1 | 1 | 1 | 7 | 4 | 10 | 5 | 17 | 6 | | | | | | |
| 3 | 12 | 62 | 3 | 23 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 4 | 3 | 4 | 5 | 5 | | | | | | |
| 3 | 19 | 62 | 3 | 28 | 0 | 0 | 1 | 1 | 1 | 1 | 3 | 4 | 8 | 5 | 11 | 6 | | | | | | |
| 3 | 26 | 62 | 4 | 5 | 0 | 1 | 1 | 1 | 1 | 1 | 9 | 4 | 12 | 5 | 21 | 6 | | | | | | |
| 4 | 2 | 62 | 4 | 13 | 0 | 1 | 1 | 1 | 1 | 1 | 17 | 4 | 13 | 5 | 30 | 6 | | | | | | |
| 4 | 16 | 62 | 5 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 15 | 5 | 9 | 5 | 24 | 7 | | | | | | |
| 4 | 23 | 62 | 5 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 3 | 6 | 3 | 7 | | | | | | |
| 4 | 30 | 62 | 6 | 4 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 5 | 9 | 6 | 11 | 7 | | | | | | |
| 5 | 7 | 62 | 6 | 8 | 0 | 0 | 1 | 1 | 1 | 1 | 7 | 5 | 11 | 5 | 18 | 7 | | | | | | |
| 5 | 14 | 62 | 6 | 21 | 0 | 1 | 0 | 1 | 0 | 1 | 3 | 6 | 15 | 6 | 18 | 8 | | | | | | |
| 5 | 21 | 62 | 6 | 26 | 1 | 1 | 1 | 1 | 2 | 1 | 5 | 5 | 12 | 7 | 17 | 9 | | | | | | |
| 5 | 28 | 62 | 7 | 6 | 1 | 1 | 0 | 0 | 1 | 1 | 7 | 6 | 10 | 7 | 17 | 9 | | | | | | |
| 6 | 4 | 62 | 7 | 5 | 0 | 1 | 0 | 0 | 0 | 1 | 3 | 5 | 9 | 7 | 12 | 9 | | | | | | |
| 6 | 11 | 62 | 7 | 11 | 0 | 1 | 1 | 1 | 1 | 1 | 4 | 6 | 10 | 7 | 14 | 9 | | | | | | |
| 6 | 18 | 62 | 7 | 13 | 1 | 1 | 0 | 0 | 1 | 1 | 8 | 4 | 5 | 4 | 13 | 6 | | | | | | |
| 6 | 25 | 62 | 7 | 20 | 0 | 1 | 0 | 1 | 0 | 1 | 6 | 5 | 4 | 6 | 10 | 7 | | | | | | |
| 7 | 2 | 62 | 8 | 1 | – | – | – | – | – | – | 6 | 7 | 10 | 8 | 16 | 11 | | | | | | |
| 7 | 23 | 62 | 8 | 15 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 6 | 4 | 7 | 4 | 9 | | | | | | |
| 7 | 30 | 62 | 9 | 19 | – | – | – | – | – | – | 2 | 6 | 15 | 8 | 17 | 10 | | | | | | |
| 8 | 7 | 62 | 8 | 27 | – | – | – | – | – | – | 1 | 3 | 12 | 3 | 13 | 4 | | | | | | |
| 8 | 13 | 62 | 8 | 30 | – | – | – | – | – | – | 14 | 7 | 12 | 9 | 26 | 11 | | | | | | |

# RADIOACTIVITY DETERMINATIONS

**STATION LOCATION** YAKIMA RIVER AT

RICHLAND, WASHINGTON 89

| ATE MPLE AKEN | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| AY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 20 | 62 | 9 | 6 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 5 | 12 | 7 | 14 | 9 | | | | | | |
| 27 | 62 | 9 | 27 | - | - | - | - | - | - | 0 | 7 | 10 | 9 | 10 | 11 | | | | | | |
| 4 | 62 | 9 | 28 | - | - | - | - | - | - | 3 | 5 | 11 | 7 | 14 | 9 | | | | | | |
| 10 | 62 | 10 | 14 | - | - | - | - | - | - | 0 | 6 | 13 | 8 | 13 | 10 | | | | | | |
| 24 | 62 | 10 | 18 | 0 | 1 | 1 | 2 | 1 | 2 | 0 | 5 | 13 | 8 | 13 | 9 | | | | | | |

**STATION LOCATION** YAKIMA RIVER AT
RICHLAND, WASHINGTON

| DATE OF SAMPLE | | | ALGAE *(Number per milliliter)* | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - *Genera and Count Level per ml. (See text for Codes)* | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED *(Pigmented)* | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILAMENTOUS | COCCOID | FILAMENTOUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 2500 | 0 | 40 | 60 | 0 | 0 | 0 | 810 | 1620 | 60 | 770 | 91 | 3 | 68 | 2 | 86 | 2 | 71 | 1 | | | | | | | | | | | | |
| 10 | 16 | 61 | 6500 | 0 | 140 | 100 | 0 | 80 | 0 | 1410 | 4720 | 60 | 910 | 92 | 5 | 87 | 4 | 71 | 3 | 68 | 1 | | | | | | | | | | | | |
| 11 | 6 | 61 | 2100 | 0 | 20 | 20 | 0 | 0 | 0 | 100 | 1970 | 20 | 540 | 92 | 3 | 87 | 2 | 82 | 2 | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 2100 | 50 | 50 | 70 | 0 | 70 | 0 | 160 | 1760 | 0 | 320 | 84 | 1 | | | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 2300 | 0 | 0 | 0 | 0 | 20 | 0 | 270 | 2010 | 130 | 1320 | 92 | 3 | 82 | 3 | 87 | 2 | 68 | 1 | | | | | | | | | | | | |
| 12 | 18 | 61 | 1000 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 870 | 0 | 120 | 87 | 2 | 92 | 1 | 82 | 1 | | | | | | | | | | | | | | |
| 1 | 2 | 62 | 4700 | 180 | 0 | 50 | 0 | 0 | 0 | 520 | 3940 | 70 | 770 | 92 | 7 | 82 | 3 | 87 | 2 | 68 | 1 | 2 | 1 | | | | | | | | | | |
| 1 | 15 | 62 | 2100 | 0 | 0 | 40 | 0 | 0 | 0 | 170 | 1880 | 40 | 680 | 92 | 3 | 82 | 2 | 87 | 1 | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 1200 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 1100 | 110 | 4330 | 92 | 2 | 82 | 1 | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 5400 | 40 | 0 | 0 | 0 | 80 | 20 | 540 | 4680 | 40 | 1280 | 92 | 4 | 87 | 3 | 82 | 2 | 68 | 2 | 79 | 2 | 88 | 1 | 73 | 1 | | | | | | |
| 3 | 5 | 62 | 900 | 0 | 0 | 0 | 0 | 20 | 0 | 150 | 770 | 20 | 300 | 87 | 2 | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 14100 | 0 | 0 | 0 | 0 | 80 | 80 | 970 | 12980 | 60 | 1080 | 87 | 7 | 71 | 3 | 82 | 3 | 92 | 2 | 88 | 1 | | | | | | | | | | |
| 4 | 2 | 62 | 8100 | 0 | 0 | 120 | 0 | 0 | 0 | 1930 | 6040 | 170 | 1620 | 87 | 5 | 71 | 4 | 82 | 3 | 92 | 3 | 88 | 2 | | | | | | | | | | |
| 4 | 16 | 62 | 4700 | 0 | 40 | 170 | 20 | 40 | 40 | 1820 | 2570 | 380 | 2430 | 71 | 4 | 92 | 3 | 87 | 2 | 82 | 2 | | | | | | | | | | | | |
| 5 | 7 | 62 | 2800 | 0 | 0 | 210 | 0 | 20 | 0 | 910 | 1710 | 150 | 1200 | 82 | 2 | 68 | 2 | 71 | 2 | 87 | 2 | 92 | 1 | 88 | 1 | 79 | 1 | | | | | | |
| 5 | 21 | 62 | 7500 | 0 | 0 | 40 | 0 | 0 | 0 | 1600 | 5870 | 170 | 2530 | 87 | 4 | 82 | 4 | 68 | 3 | 71 | 3 | 92 | 2 | 79 | 2 | 88 | 1 | 73 | 1 | | | | |
| 6 | 4 | 62 | 2000 | 0 | 20 | 0 | 0 | 40 | 0 | 460 | 1520 | 170 | 2950 | 87 | 2 | 82 | 2 | 92 | 1 | 68 | 1 | 71 | 1 | | | | | | | | | | |
| 6 | 18 | 62 | 7700 | 210 | 20 | 210 | 40 | 530 | 0 | 1000 | 5740 | 490 | 3120 | 87 | 4 | 68 | 3 | 57 | 2 | 92 | 2 | 88 | 2 | 79 | 1 | 73 | 1 | 85 | 1 | 81 | 1 | | |
| 7 | 2 | 62 | 17600 | 930 | 130 | 1010 | * | 210 | 0 | 8440 | 4140 | 720 | 2150 | 68 | 6 | 50 | 5 | 71 | 4 | 2 | 3 | 82 | 3 | 40 | 2 | 92 | 2 | 87 | 2 | 69 | 1 | | |
| 7 | 16 | 62 | 50400 | 170 | 0 | 2830 | * | 2910 | 40 | 35910 | 5190 | 3590 | 2410 | 71 | 8 | 68 | 7 | 92 | 5 | 50 | 5 | 51 | 5 | 40 | 3 | 38 | 2 | 69 | 2 | 88 | 2 | | |
| 8 | 7 | 62 | 6000 | 0 | 0 | 410 | 0 | 310 | 20 | 1040 | 4260 | 410 | 2070 | 92 | 5 | 68 | 3 | 38 | 2 | 69 | 2 | 51 | 1 | | | | | | | | | | |
| 8 | 20 | 62 | 20100 | 930 | 0 | 1040 | 60 | 620 | 20 | 11970 | 5510 | 1240 | 2820 | 68 | 6 | 71 | 6 | 92 | 5 | 2 | 3 | 51 | 3 | 38 | 2 | 87 | 1 | 69 | 1 | 3 | 1 | 30 | 1 |
| 9 | 4 | 62 | 8400 | 100 | 40 | 560 | 0 | 290 | 0 | 3480 | 3930 | 660 | 2110 | 68 | 5 | 92 | 5 | 38 | 1 | 51 | 1 | 69 | 1 | 82 | 1 | 71 | 1 | 79 | 1 | 87 | 1 | 40 | 1 |
| 9 | 17 | 62 | 700 | 0 | 0 | 60 | 0 | 20 | 0 | 190 | 480 | 110 | 1060 | 92 | 1 | 68 | 1 | | | | | | | | | | | | | | | | |
| *7 | 2 | 62 | | | | | 2700 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| *7 | 16 | 62 | | | | | 3290 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | OTHER SPECIES PERCENT | FUNGI AND SHEATHED BACTERIA Number per ml. | PROTOZOA (Identifiable) Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | | |
| | | | 1ST | | 2ND | | 3RD | | 4TH | | | | | | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | NUMBER PER LITER | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | NUMBER PER LITER | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 92 | 60 | 64 | 9 | 65 | 7 | 16 | 4 | 20 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 10 | 16 | 61 | 92 | 67 | 65 | 21 | 64 | 5 | 36 | 3 | 4 | 0 | 0 | 16 | 15 | 1 | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 92 | 34 | 65 | 26 | 36 | 23 | 64 | 3 | 14 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 36 | 45 | 65 | 29 | 92 | 19 | 64 | 3 | 4 | 90 | 0 | 6 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 92 | 37 | 36 | 33 | 65 | 20 | 66 | 5 | 5 | 0 | 0 | 6 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 12 | 18 | 61 | 65 | 32 | 92 | 30 | 36 | 23 | 66 | 1 | 14 | 20 | 0 | 10 | 8 | 1 | | | | | | | | | 0 | | | | | | | 1 | 0 |
| 1 | 2 | 62 | 92 | 35 | 36 | 28 | 65 | 12 | 97 | 5 | 20 | 20 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 1 |
| 1 | 15 | 62 | 92 | 31 | 36 | 18 | 16 | 5 | 97 | 5 | 41 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 1 | 2 |
| 2 | 5 | 62 | 92 | 48 | 36 | 19 | 52 | 7 | 16 | 5 | 21 | 50 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 1 | 2 |
| 2 | 19 | 62 | 92 | 30 | 36 | 9 | 65 | 8 | 46 | 8 | 45 | 310 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 3 | 0 |
| 3 | 5 | 62 | 65 | 30 | 92 | 10 | 66 | 9 | 36 | 8 | 43 | 0 | 0 | 0 | | | | | | | | | | | 1 | | | | | | | 4 | 0 |
| 3 | 19 | 62 | 65 | 77 | 36 | 7 | 66 | 7 | 92 | 2 | 7 | 0 | 0 | 4 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 4 | 2 | 62 | 65 | 39 | 36 | 15 | 92 | 15 | 66 | 11 | 20 | 40 | 0 | 10 | | | | | | | | | | | 1 | | | | | | | 0 | 8 |
| 4 | 16 | 62 | 92 | 38 | 36 | 18 | 65 | 16 | 16 | 4 | 24 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 36 | 26 | 92 | 13 | 65 | 13 | 16 | 7 | 41 | 40 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 36 | 29 | 65 | 16 | 66 | 11 | 64 | 8 | 36 | 210 | 0 | 5 | | | | | | | | | | | 1 | | | | | | | 1 | 1 |
| 6 | 4 | 62 | 36 | 22 | 92 | 18 | 65 | 15 | 16 | 6 | 39 | 0 | 0 | 1 | | | | | | | | | | | 1 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 36 | 25 | 64 | 12 | 65 | 10 | 92 | 9 | 44 | 0 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 36 | 34 | 92 | 23 | 26 | 8 | 64 | 5 | 30 | 40 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 16 | 62 | 82 | 47 | 26 | 31 | 92 | 18 | 70 | 1 | 3 | 40 | 0 | 41 | 2 | 2 | 6 | 2 | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 7 | 62 | 92 | 86 | 26 | 8 | 16 | 2 | 36 | 1 | 3 | 0 | 0 | 37 | 2 | 1 | 21 | 1 | 15 | 1 | | | | | 6 | 51 | 1 | 76 | 1 | | | 0 | 0 |
| 8 | 20 | 62 | 92 | 50 | 82 | 21 | 26 | 20 | 70 | 1 | 8 | 0 | 0 | 48 | 2 | 3 | 15 | 1 | 22 | 1 | | | | | 0 | | | | | | | 0 | 9 |
| 9 | 4 | 62 | 92 | 70 | 36 | 7 | 16 | 6 | 26 | 4 | 13 | 60 | 0 | 3 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 92 | 41 | 65 | 15 | 36 | 11 | 26 | 7 | 26 | 0 | 0 | 1 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | NEUTRALS | | | | | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| MONTH | DAY | YEAR | MONTH | DAY | | | | | | | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | | | | |
| 10 | 5 | 61 | 12 | 7 | 2430 | 140 | 32 | 108 | 1 | 7 | 10 | 4 | 2 | 4 | 0 | 3 | 1 | 1 | 9 |
| 12 | 7 | 61 | 1 | 8 | 2330 | 165 | 41 | 124 | 0 | 6 | 21 | 6 | 5 | 10 | 0 | 4 | 1 | 1 | 8 |
| 1 | 8 | 62 | 2 | 20 | 3660 | 134 | 23 | 111 | 0 | 3 | 13 | 4 | 1 | 8 | 0 | 3 | 1 | 0 | 3 |
| 2 | 20 | 62 | 3 | 21 | 5140 | 78 | 22 | 56 | 0 | 4 | 10 | 2 | 1 | 7 | 0 | 3 | 1 | 0 | 4 |
| 3 | 21 | 62 | 4 | 30 | 2780 | 113 | 30 | 83 | 1 | 8 | 11 | 4 | 1 | 6 | 0 | 4 | 2 | 1 | 3 |
| 4 | 30 | 62 | 5 | 22 | 4570 | 81 | 28 | 53 | 1 | 8 | 9 | 1 | 1 | 6 | 1 | 3 | 2 | 0 | 5 |
| 5 | 22 | 62 | 6 | 19 | 2370 | 130 | 42 | 88 | 0 | 11 | 21 | 6 | 3 | 12 | 0 | 5 | 2 | 0 | 3 |
| 6 | 19 | 62 | 7 | 12 | 2170# | 132 | 51 | 81 | 1 | 14 | 17 | 3 | 2 | 11 | 1 | 7 | 3 | 0 | 9 |
| 7 | 13 | 62 | 8 | 7 | 2640 | 170 | 62 | 108 | 1 | 12 | 20 | 3 | 2 | 15 | 0 | 6 | 3 | 1 | 19 |
| 8 | 7 | 62 | 8 | 30 | 3300 | 97 | 31 | 66 | 1 | 9 | 10 | 1 | 1 | 8 | 0 | 3 | 2 | 1 | 5 |
| 8 | 30 | 62 | 9 | 20 | 2600 | 103 | 28 | 75 | 1 | 8 | 13 | 3 | 2 | 8 | 0 | 3 | 1 | 1 | 1 |
| 9 | 20 | 62 | 10 | 9 | 3450# | 59 | 10 | 49 | 0 | 3 | 5 | 1 | 1 | 3 | 0 | 1 | 0 | 0 | 1 |

# ESTIMATED

NATIONAL WATER QUALITY NETWORK

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** WASHINGTON
**MAJOR BASIN** PACIFIC NORTHWEST
**MINOR BASIN** YAKIMA RIVER
**STATION LOCATION** YAKIMA RIVER AT
RICHLAND, WASHINGTON 89

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 14.9 | 10.4 | 8.3 | 2.4 | - | - | - | .1 | 10 | 160 | 120 | - | 8 | 30 | - | 154 | 200 |
| 10 | 9 | 61 | 13.4 | 10.5 | 8.4 | 1.3 | - | - | - | .1 | 11 | 160 | 120 | - | 9 | 30 | .0 | 147 | *33 |
| 10 | 22 | 61 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 170 |
| 10 | 23 | 61 | 10.7 | 9.5 | 8.3 | 1.0 | - | - | - | .1 | 12 | 160 | 130 | - | 7 | 30 | .0 | 166 | - |
| 10 | 30 | 61 | 9.3 | 10.8 | 8.4 | 1.2 | - | - | - | .1 | 10 | 160 | 140 | - | 4 | 26 | - | 153 | 300 |
| 11 | 6 | 61 | 6.8 | 11.8 | 8.5 | 2.0 | - | - | - | .1 | 10 | 150 | 120 | - | 5 | 39 | - | 240 | *33 |
| 11 | 13 | 61 | 6.1 | 12.1 | 8.5 | 2.1 | - | - | - | .1 | 10 | 150 | 130 | - | 6 | 64 | - | 224 | 130 |
| 11 | 20 | 61 | 4.5 | 12.0 | 8.5 | 1.9 | - | - | - | .1 | 10 | 160 | 120 | - | 4 | 36 | - | 214 | - |
| 11 | 27 | 61 | 4.8 | 11.2 | 8.3 | 1.8 | - | - | - | .1 | 15 | 140 | 110 | - | 5 | 33 | .0 | 196 | 33 |
| 12 | 4 | 61 | 6.6 | 10.8 | 8.2 | 2.2 | - | - | - | - | - | - | - | - | - | - | .0 | - | 67 |
| 12 | 18 | 61 | 3.0 | 11.0 | 8.4 | 1.6 | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 1 | 2 | 62 | 3.6 | 10.6 | 8.1 | 1.3 | - | - | - | .2 | 8 | 100 | 80 | - | 7 | 24 | - | 161 | 250 |
| 1 | 8 | 62 | 5.8 | 10.5 | 8.0 | 1.4 | 13 | - | - | .2 | 10 | 90 | 90 | - | 5 | 17 | .0 | 186 | 920 |
| 1 | 15 | 62 | 1.5 | 11.2 | 7.6 | 2.5 | - | - | - | .1 | 10 | 80 | 60 | - | 4 | 19 | .0 | - | 430 |
| 1 | 22 | 62 | .3 | 11.6 | 7.6 | 2.8 | - | - | - | .1 | 10 | 100 | 90 | - | 5 | 24 | - | 117 | *33 |
| 1 | 29 | 62 | 1.8 | 11.3 | 7.7 | 2.4 | - | - | - | .1 | 10 | 90 | 80 | - | 5 | 19 | 3.0 | 112 | 100 |
| 2 | 5 | 62 | 4.6 | 11.6 | 7.8 | 2.6 | - | - | - | .1 | 10 | 80 | 70 | - | 26 | 23 | - | 146 | 33 |
| 2 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 2 | 19 | 62 | 7.5 | 11.0 | 7.9 | 2.4 | - | - | - | .1 | 10 | 90 | 80 | - | 4 | 20 | - | 166 | 300 |
| 2 | 20 | 62 | - | - | - | - | 9 | - | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 26 | 62 | 2.4 | 13.2 | 8.0 | 2.2 | - | - | - | .1 | 10 | 100 | 90 | - | 3 | 27 | - | 165 | - |
| 3 | 5 | 62 | 4.3 | 11.8 | 8.2 | - | - | - | - | .1 | 10 | 110 | 90 | - | 5 | - | - | - | 100 |
| 3 | 12 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | *33 |
| 3 | 19 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 300 |
| 3 | 21 | 62 | - | - | - | - | 17 | - | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 2 | 62 | 12.7 | 9.9 | 7.8 | 2.2 | - | - | - | - | - | - | - | - | - | - | - | - | *33 |
| 4 | 5 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | .0 | - | - |
| 4 | 16 | 62 | 15.3 | 9.6 | 8.0 | 2.0 | - | - | - | - | 5 | 80 | 70 | - | 5 | 17 | .0 | - | - |
| 4 | 23 | 62 | 16.8 | 9.7 | 7.8 | 2.3 | - | - | - | - | 10 | 70 | 60 | - | 9 | 15 | .1 | - | 270 |
| 4 | 30 | 62 | 13.6 | 11.0 | 8.4 | 2.2 | 32 | - | - | - | 10 | 100 | 90 | - | 18 | 25 | .0 | - | 130 |
| 5 | 7 | 62 | 14.6 | 10.9 | 8.2 | 1.5 | - | - | - | - | 5 | 120 | 80 | - | 8 | 25 | .0 | - | 200 |
| 5 | 14 | 62 | 17.0 | 10.0 | 8.1 | 1.8 | - | - | - | - | 10 | 110 | 100 | - | 4 | 22 | - | - | 330 |
| 5 | 21 | 62 | 17.0 | 8.0 | 8.0 | 1.7 | - | - | - | - | 10 | 130 | 100 | - | 2 | 23 | - | - | 300 |
| 6 | 4 | 62 | 15.6 | 10.1 | 8.0 | 2.1 | - | - | - | - | 10 | 100 | 80 | - | 3 | 17 | - | - | 230 |
| 6 | 11 | 62 | 21.2 | 9.1 | 8.1 | 2.1 | - | - | - | - | 12 | 135 | 110 | - | 4 | 24 | - | - | 50 |
| 6 | 18 | 62 | 21.4 | 8.0 | 7.9 | 1.6 | - | - | - | - | 10 | 105 | 80 | - | 7 | 22 | - | - | 130 |
| 6 | 25 | 62 | 23.2 | 8.2 | 7.9 | 1.8 | - | - | - | - | 10 | 110 | 75 | - | 6 | 18 | - | - | 200 |
| 7 | 2 | 62 | 21.6 | 10.2 | 8.4 | 1.5 | - | - | - | - | 12 | 140 | 105 | - | 4 | 27 | .0 | - | 440 |
| 7 | 9 | 62 | 24.5 | 10.7 | 8.3 | 2.2 | - | - | - | - | 12 | 150 | 110 | - | 7 | 28 | - | - | 70 |

# CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**MAJOR BASIN** PACIFIC NORTHWEST

**MINOR BASIN** YAKIMA RIVER

**STATION LOCATION** YAKIMA RIVER AT
RICHLAND, WASHINGTON

89

| DATE OF SAMPLE MONTH | DAY | YEAR | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND 1-HOUR mg/l | CHLORINE DEMAND 24-HOUR mg/l | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 10 | 62 | - | - | - | - | 19 | - | - | - | - | - | - | - | - | - | - | - | - |
| 7 | 16 | 62 | 23.7 | 10.4 | 8.7 | 3.1 | - | - | - | - | 10 | 170 | 120 | - | 4 | 32 | - | - | 200 |
| 7 | 23 | 62 | 26.4 | 8.7 | 7.6 | 3.4 | - | - | - | - | 10 | 165 | 130 | - | 4 | 33 | .1 | - | 200 |
| 7 | 30 | 62 | 27.7 | 9.1 | 8.1 | 2.3 | - | - | - | - | 15 | 160 | 130 | - | 23 | 37 | - | 255 | 100 |
| 8 | 7 | 62 | - | - | - | - | 11 | - | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 13 | 62 | 23.2 | 8.7 | 8.2 | 3.2 | - | - | - | - | 10 | 150 | 110 | - | 11 | 35 | - | 204 | 330 |
| 8 | 20 | 62 | 24.8 | 9.9 | 8.5 | 2.9 | - | - | - | - | 12 | 140 | 105 | - | 9 | 38 | - | 193 | 230 |
| 8 | 27 | 62 | 19.4 | 9.4 | 8.4 | 2.6 | - | - | - | - | 15 | 180 | 135 | - | 8 | 35 | - | 215 | - |
| 8 | 28 | 62 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 200 |
| 8 | 30 | 62 | - | - | - | - | 17 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 10 | 62 | 18.0 | 8.6 | 8.0 | 1.9 | - | - | - | .2 | 10 | 180 | 140 | - | 19 | 41 | .0 | 218 | 670 |
| 9 | 17 | 62 | 18.6 | 9.0 | 7.8 | 2.0 | - | - | - | .1 | 10 | 180 | 140 | - | 21 | 36 | - | 215 | 300 |
| 9 | 20 | 62 | - | - | - | - | 7 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 22 | 62 | - | - | - | - | 27 | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 24 | 62 | 19.8 | 8.5 | 8.1 | 2.3 | - | - | - | .1 | 10 | 175 | 125 | - | 27 | 38 | .0 | 221 | 1300 |

PROVISIONAL--SUBJECT TO REVISION

Gaging Station at Kiona, Washington
Operated by U.S. Geological Survey

MINOR BASIN Yakima River

STATION LOCATION Yakima River at
Richland, Washington

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.910 | 2.220 | 2.180 | 3.670 | 3.510 | 2.880 | 2.490 | 1.900 | 4.840 | 1.680 | 1.160 | 1.850 |
| 2 | 2.170 | 2.170 | 2.170 | 3.670 | 3.510 | 2.940 | 2.640 | 1.670 | 4.310 | 1.490 | 2.010 | 1.620 |
| 3 | 2.140 | 2.230 | 2.140 | 3.580 | 3.580 | 2.820 | 2.710 | 1.650 | 3.780 | 1.470 | 2.000 | 1.480 |
| 4 | 2.270 | 2.130 | 2.170 | 3.400 | 4.020 | 2.820 | 2.910 | 2.070 | 3.700 | 1.770 | 2.000 | 1.450 |
| 5 | 2.060 | 2.230 | 2.140 | 4.020 | 5.470 | 2.870 | 3.220 | 2.310 | 3.860 | 1.500 | 2.000 | 1.440 |
| 6 | 1.850 | 2.230 | 2.140 | 4.500 | 5.870 | 2.840 | 3.430 | 2.270 | 3.430 | 1.420 | 2.000 | 1.310 |
| 7 | 2.940 | 2.180 | 2.080 | 4.450 | 5.600 | 2.820 | 3.640 | 2.200 | 2.980 | 1.700 | 2.070 | 1.430 |
| 8 | 2.740 | 2.180 | 2.120 | 4.500 | 5.400 | 2.750 | 7.740 | 2.120 | 2.500 | 1.950 | 2.040 | 1.500 |
| 9 | 1.490 | 2.140 | 2.070 | 7.440 | 4.800 | 2.700 | 11.400 | 2.260 | 2.190 | 1.480 | 2.040 | 1.470 |
| 10 | 1.550 | 2.230 | 2.030 | 9.240 | 4.620 | 2.880 | 8.590 | 2.610 | 2.360 | 1.300 | 2.070 | 1.460 |
| 11 | 1.580 | 2.200 | 1.960 | 8.070 | 4.570 | 2.840 | 6.600 | 2.890 | 2.890 | 1.360 | 2.030 | 1.640 |
| 12 | 1.580 | 2.080 | 1.820 | 6.800 | 4.380 | 2.640 | 5.530 | 2.950 | 3.280 | 1.340 | 2.070 | 1.660 |
| 13 | 1.660 | 2.130 | 1.750 | 6.000 | 4.230 | 2.530 | 4.820 | 3.040 | 3.240 | 1.160 | 2.080 | 1.830 |
| 14 | 1.740 | 2.130 | 1.760 | 5.510 | 4.350 | 2.410 | 4.380 | 3.080 | 3.100 | .941 | 2.080 | 1.880 |
| 15 | 2.450 | 2.150 | 1.830 | 5.060 | 4.600 | 2.370 | 4.330 | 2.980 | 3.610 | 1.030 | 2.080 | 1.940 |
| 16 | 2.350 | 2.140 | 1.860 | 4.750 | 4.840 | 2.350 | 4.820 | 2.680 | 3.480 | 1.190 | 2.070 | 2.000 |
| 17 | 2.220 | 2.140 | 2.120 | 4.450 | 4.650 | 2.370 | 5.440 | 2.540 | 3.480 | 1.230 | 2.070 | 2.000 |
| 18 | 2.100 | 2.080 | 1.690 | 4.210 | 4.620 | 2.440 | 4.720 | 2.310 | 4.380 | 1.160 | 2.070 | 1.840 |
| 19 | 2.200 | 2.030 | 1.770 | 3.930 | 4.380 | 2.500 | 4.330 | 2.220 | 4.960 | 1.130 | 2.070 | 1.780 |
| 20 | 2.910 | 2.040 | 1.800 | 3.220 | 4.210 | 2.610 | 4.090 | 2.480 | 4.820 | 1.410 | 2.070 | 1.740 |
| 21 | 2.810 | 2.040 | 2.130 | 2.570 | 4.140 | 2.440 | 4.450 | 3.130 | 4.550 | 1.560 | 2.070 | 1.670 |
| 22 | 2.810 | 2.000 | 2.750 | 2.850 | 3.940 | 2.400 | 4.060 | 2.890 | 4.110 | 1.450 | 1.600 | 1.670 |
| 23 | 2.740 | 1.920 | 2.350 | 2.710 | 3.750 | 2.500 | 3.430 | 2.450 | 3.740 | 1.400 | 1.620 | 1.700 |
| 24 | 2.610 | 2.150 | 2.240 | 2.680 | 3.670 | 2.630 | 3.010 | 2.570 | 3.460 | 1.450 | 1.550 | 1.630 |
| 25 | 2.450 | 2.350 | 2.430 | 3.180 | 3.460 | 2.490 | 2.750 | 3.860 | 3.310 | 1.500 | 1.620 | 1.630 |
| 26 | 2.490 | 2.320 | 3.190 | 3.460 | 3.260 | 2.750 | 2.800 | 4.350 | 3.240 | 1.500 | 1.620 | 1.630 |
| 27 | 2.410 | 2.140 | 3.690 | 3.900 | 3.130 | 3.060 | 2.600 | 5.190 | 3.140 | 1.340 | 1.550 | 1.630 |
| 28 | 2.390 | 2.140 | 3.590 | 4.520 | 2.870 | 2.950 | 2.440 | 5.200 | 2.590 | 1.150 | 1.690 | 1.660 |
| 29 | 2.390 | 2.190 | 3.430 | 3.930 |  | 2.700 | 2.700 | 5.260 | 2.170 | 1.150 | 1.740 | 1.790 |
| 30 | 2.340 | 2.180 | 3.260 | 3.780 |  | 2.480 | 2.280 | 5.190 | 1.950 | 1.200 | 1.760 | 2.010 |
| 31 | 2.270 |  | 3.320 | 3.430 |  | 2.440 |  | 4.890 |  | 1.210 | 1.860 |  |

**NATIONAL WATER QUALITY NETWORK**

# RADIOACTIVITY DETERMINATIONS

**STATE** MONTANA
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** YELLOWSTONE RIVER
**STATION LOCATION** YELLOWSTONE RIVER NEAR
SIDNEY, MONTANA 55

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMINATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMINATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | μμc/l | ± | MO. | DAY | μμc/g | ± | μμc/g | ± |
| 10 | 2 | 61 | 10 | 26 | - | - | - | - | - | - | 69 | 22 | 19 | 16 | 88 | 27 | | | | | | |
| 10 | 9 | 61 | 10 | 31 | - | - | - | - | - | - | 31 | 16 | 32 | 16 | 63 | 23 | | | | | | |
| 10 | 16 | 61 | 10 | 30 | - | - | - | - | - | - | 52 | 21 | 13 | 16 | 65 | 26 | | | | | | |
| 10 | 23 | 61 | 11 | 6 | 13 | 8 | 2 | 2 | 15 | 8 | 94 | 17 | 16 | 11 | 110 | 20 | | | | | | |
| 10 | 30 | 61 | 11 | 11 | - | - | - | - | - | - | 21 | 14 | 1 | 15 | 22 | 20 | | | | | | |
| 11 | 6 | 61 | 11 | 22 | - | - | - | - | - | - | 8 | 13 | 21 | 15 | 29 | 20 | | | | | | |
| 11 | 13 | 61 | 11 | 27 | - | - | - | - | - | - | 47 | 16 | 48 | 16 | 95 | 23 | | | | | | |
| 11 | 20 | 61 | 12 | 1 | - | - | - | - | - | - | 26 | 18 | 32 | 19 | 58 | 26 | | | | | | |
| 11 | 27 | 61 | 12 | 8 | 1 | 2 | 6 | 4 | 7 | 4 | 15 | 14 | 15 | 15 | 30 | 21 | | | | | | |
| 12 | 4 | 61 | 12 | 18 | - | - | - | - | - | - | 9 | 13 | 20 | 17 | 29 | 20 | | | | | | |
| 12 | 11 | 61 | 12 | 22 | - | - | - | - | - | - | 0 | 11 | 16 | 16 | 16 | 19 | | | | | | |
| 12 | 18 | 61 | 12 | 29 | - | - | - | - | - | - | 1 | 10 | 28 | 17 | 29 | 20 | | | | | | |
| 12 | 26 | 61 | 1 | 9 | 2 | 2 | 8 | 5 | 10 | 5 | 6 | 16 | 50 | 22 | 56 | 27 | | | | | | |
| 1 | 1 | 62 | 1 | 30 | - | - | - | - | - | - | 2 | 11 | 13 | 15 | 15 | 19 | | | | | | |
| 1 | 8 | 62 | 1 | 23 | - | - | - | - | - | - | 83 | 13 | 35 | 15 | 118 | 20 | | | | | | |
| 1 | 15 | 62 | 1 | 26 | - | - | - | - | - | - | 21 | 10 | 57 | 15 | 78 | 18 | | | | | | |
| 1 | 22 | 62 | 2 | 1 | 1 | 2 | 6 | 5 | 7 | 5 | 18 | 17 | 35 | 21 | 53 | 27 | | | | | | |
| 1 | 29 | 62 | 2 | 13 | - | - | - | - | - | - | 5 | 11 | 23 | 17 | 28 | 20 | | | | | | |
| 2 | 5 | 62 | 2 | 16 | - | - | - | - | - | - | 35 | 12 | 39 | 11 | 74 | 16 | | | | | | |
| 2 | 12 | 62 | 3 | 2 | - | - | - | - | - | - | 29 | 10 | 79 | 12 | 108 | 16 | | | | | | |
| 2 | 19 | 62 | 3 | 6 | - | - | - | - | - | - | 94 | 23 | 48 | 16 | 142 | 28 | | | | | | |
| 2 | 26 | 62 | 3 | 15 | 1 | 1 | 7 | 5 | 8 | 5 | 10 | 8 | 56 | 13 | 66 | 15 | | | | | | |
| 3 | 5 | 62 | 3 | 20 | - | - | - | - | - | - | 14 | 11 | 45 | 16 | 59 | 19 | | | | | | |
| 3 | 12 | 62 | 3 | 26 | - | - | - | - | - | - | 0 | 22 | 29 | 27 | 29 | 35 | | | | | | |
| 3 | 19 | 62 | 3 | 30 | - | - | - | - | - | - | 8 | 9 | 22 | 12 | 30 | 15 | | | | | | |
| 3 | 26 | 62 | 4 | 9 | 18 | 11 | 5 | 3 | 23 | 11 | 93 | 18 | 34 | 11 | 127 | 21 | | | | | | |
| 4 | 2 | 62 | 4 | 19 | - | - | - | - | - | - | 88 | 25 | 22 | 16 | 110 | 30 | | | | | | |
| 4 | 9 | 62 | 4 | 25 | - | - | - | - | - | - | 34 | 18 | 31 | 17 | 65 | 25 | | | | | | |
| 4 | 16 | 62 | 4 | 30 | - | - | - | - | - | - | 59 | 31 | 35 | 28 | 94 | 42 | | | | | | |
| 4 | 27 | 62 | 6 | 1 | 5 | 4 | 4 | 3 | 9 | 5 | 24 | 16 | 13 | 15 | 37 | 22 | | | | | | |
| 4 | 30 | 62 | 6 | 4 | - | - | - | - | - | - | 247 | 65 | 17 | 16 | 264 | 67 | | | | | | |
| 5 | 7 | 62 | 6 | 20 | - | - | - | - | - | - | 126 | 29 | 42 | 22 | 168 | 36 | | | | | | |
| 5 | 14 | 62 | 6 | 25 | - | - | - | - | - | - | 246 | 36 | 40 | 5 | 286 | 36 | | | | | | |
| 5 | 21 | 62 | 6 | 27 | - | - | - | - | - | - | 100 | 13 | 40 | 9 | 140 | 16 | | | | | | |
| 5 | 28 | 62 | 10 | 16 | 43 | 141 | 6 | 4 | 49 | 141 | 1852 | 563 | 26 | 17 | 1878 | 564 | | | | | | |
| 6 | 4 | 62 | 7 | 5 | - | - | - | - | - | - | 334 | 111 | 31 | 14 | 365 | 112 | | | | | | |
| 6 | 11 | 62 | 7 | 10 | - | - | - | - | - | - | 149 | 74 | 8 | 7 | 157 | 74 | | | | | | |
| 6 | 18 | 62 | 8 | 13 | - | - | - | - | - | - | 346 | 109 | 26 | 9 | 372 | 109 | | | | | | |
| 6 | 25 | 62 | 7 | 23 | 16 | 23 | 1 | 2 | 17 | 23 | 184 | 96 | 20 | 8 | 204 | 96 | | | | | | |
| 7 | 2 | 62 | 8 | 10 | - | - | - | - | - | - | 21 | 14 | 2 | 9 | 23 | 17 | | | | | | |
| 7 | 9 | 62 | 8 | 6 | - | - | - | - | - | - | 27 | 8 | 75 | 12 | 102 | 14 | | | | | | |

**STATION LOCATION** YELLOWSTONE RIVER NEAR
SIDNEY, MONTANA

| DATE SAMPLE TAKEN | | | RADIOACTIVITY IN WATER | | | | | | | | | | | | | | RADIOACTIVITY IN PLANKTON | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | DATE OF DETERMI-NATION | | ALPHA | | | | | | BETA | | | | | | DATE OF DETERMI-NATION | | GROSS ACTIVITY | | | |
| | | | | | SUSPENDED | | DISSOLVED | | TOTAL | | SUSPENDED | | DISSOLVED | | TOTAL | | | | ALPHA | | BETA | |
| MO. | DAY | YR. | MO. | DAY | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | µµc/l | ± | MO. | DAY | µµc/g | ± | µµc/g | ± |
| 7 | 16 | 62 | 8 | 3 | - | - | - | - | - | - | 117 | 61 | 43 | 13 | 160 | 62 | | | | | | |
| 7 | 23 | 62 | 8 | 21 | 27 | 14 | 4 | 3 | 31 | 14 | 169 | 27 | 47 | 14 | 216 | 30 | | | | | | |
| 7 | 30 | 62 | 8 | 23 | - | - | - | - | - | - | 75 | 19 | 25 | 14 | 100 | 24 | | | | | | |
| 8 | 6 | 62 | 8 | 29 | - | - | - | - | - | - | 190 | 82 | 43 | 15 | 233 | 83 | | | | | | |
| 8 | 13 | 62 | 8 | 30 | - | - | - | - | - | - | 76 | 64 | 24 | 14 | 100 | 66 | | | | | | |
| 8 | 20 | 62 | 9 | 6 | - | - | - | - | - | - | 374 | 75 | 50 | 15 | 424 | 76 | | | | | | |
| 8 | 27 | 62 | 9 | 17 | 5 | 3 | 4 | 4 | 9 | 5 | 21 | 20 | 7 | 23 | 28 | 30 | | | | | | |
| 9 | 4 | 62 | 10 | 2 | - | - | - | - | - | - | 52 | 18 | 37 | 18 | 89 | 25 | | | | | | |
| 9 | 10 | 62 | 10 | 9 | - | - | - | - | - | - | 37 | 16 | 28 | 16 | 65 | 23 | | | | | | |
| 9 | 17 | 62 | 10 | 9 | - | - | - | - | - | - | 55 | 37 | 27 | 19 | 82 | 42 | | | | | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

**STATE** MONTANA

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** YELLOWSTONE RIVER

**STATION LOCATION** YELLOWSTONE RIVER NEAR
SIDNEY, MONTANA

| DATE OF SAMPLE | | | ALGAE (Number per milliliter) | | | | | | | | | INERT DIATOM SHELLS | | MOST ABUNDANT ALGAE - Genera and Count Level per ml. (See text for Codes) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | TOTAL | BLUE-GREEN | | GREEN | | FLAGELLATED (Pigmented) | | DIATOMS | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | 6TH | | 7TH | | 8TH | | 9TH | | 10TH | |
| MONTH | DAY | YEAR | | COCCOID | FILA-MENT-OUS | COCCOID | FILA-MENT-OUS | GREEN | OTHER | CENTRIC | PENNATE | CENTRIC | PENNATE | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL |
| 10 | 2 | 61 | 1000 | 0 | 20 | 40 | 0 | 0 | 0 | 40 | 890 | 0 | 230 | 92 | 1 | | | | | | | | | | | | | | | | | | |
| 10 | 16 | 61 | 1300 | 0 | 0 | 20 | 0 | 40 | 0 | 20 | 1240 | 0 | 390 | 92 | 2 | 87 | 1 | 97 | 1 | | | | | | | | | | | | | | |
| 11 | 6 | 61 | 300 | 0 | 20 | 20 | 0 | 0 | 0 | 0 | 270 | 20 | 670 | | | | | | | | | | | | | | | | | | | | |
| 11 | 20 | 61 | 1200 | 0 | 0 | 20 | 0 | 0 | 0 | 40 | 1140 | 20 | 210 | 92 | 3 | 82 | 1 | | | | | | | | | | | | | | | | |
| 12 | 4 | 61 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 250 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 12 | 18 | 61 | 300 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 270 | 0 | 0 | 91 | 1 | | | | | | | | | | | | | | | | | | |
| 1 | 1 | 62 | 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 1900 | 0 | 0 | 92 | 3 | 87 | 1 | | | | | | | | | | | | | | | | |
| 1 | 15 | 62 | 100 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 80 | 0 | 20 | | | | | | | | | | | | | | | | | | | | |
| 2 | 5 | 62 | 400 | 0 | 0 | 70 | 0 | 0 | 0 | 0 | 380 | 50 | 1070 | 92 | 1 | 82 | 1 | | | | | | | | | | | | | | | | |
| 2 | 19 | 62 | 700 | 0 | 0 | 20 | 0 | 20 | 0 | 0 | 680 | 0 | 250 | 87 | 1 | | | | | | | | | | | | | | | | | | |
| 3 | 5 | 62 | 100 | 0 | 0 | 0 | 0 | 80 | 0 | 0 | 20 | 0 | 40 | | | | | | | | | | | | | | | | | | | | |
| 3 | 19 | 62 | 200 | 0 | 0 | 0 | 0 | 40 | 40 | 20 | 60 | 0 | 0 | | | | | | | | | | | | | | | | | | | | |
| 4 | 2 | 62 | 1900 | 0 | 0 | 0 | 0 | 90 | 0 | 0 | 1790 | 0 | 250 | 87 | 2 | 82 | 2 | 88 | 1 | 85 | 1 | 75 | 1 | | | | | | | | | | |
| 4 | 16 | 62 | 2100 | 0 | 0 | 0 | 0 | 200 | 0 | 430 | 1450 | 20 | 660 | 92 | 3 | 71 | 2 | 82 | 1 | 51 | 1 | | | | | | | | | | | | |
| 5 | 7 | 62 | 1700 | 0 | 0 | 0 | 0 | 20 | 0 | 950 | 760 | 40 | 1650 | 71 | 3 | 87 | 1 | 82 | 1 | 92 | 1 | | | | | | | | | | | | |
| 5 | 21 | 62 | 6600 | 110 | 0 | 20 | 0 | 0 | 0 | 2150 | 4330 | 250 | 2910 | 71 | 4 | 92 | 3 | 82 | 3 | 87 | 3 | 88 | 2 | 81 | 1 | 85 | 1 | 79 | 1 | 97 | 1 | | |
| 6 | 4 | 62 | 00 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 20 | 0 | 130 | | | | | | | | | | | | | | | | | | | | |
| 6 | 18 | 62 | 3400 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 3250 | 0 | 170 | 92 | 3 | 82 | 2 | 87 | 2 | | | | | | | | | | | | | | |
| 7 | 2 | 62 | 1800 | 0 | 0 | 60 | 0 | 270 | 0 | 60 | 1410 | 20 | 170 | 92 | 2 | 82 | 1 | 57 | 1 | 88 | 1 | | | | | | | | | | | | |
| 8 | 6 | 62 | 1200 | 0 | 40 | 0 | 0 | 60 | 0 | 170 | 910 | 0 | 210 | 92 | 1 | 82 | 1 | | | | | | | | | | | | | | | | |
| 8 | 20 | 62 | 1500 | 0 | 0 | 170 | 60 | 40 | 0 | 290 | 910 | 40 | 80 | 38 | 1 | 82 | 1 | 68 | 1 | | | | | | | | | | | | | | |
| 9 | 4 | 62 | 17700 | 250 | 40 | 2820 | 0 | 660 | 0 | 9150 | 4800 | 80 | 1160 | 68 | 6 | 38 | 4 | 87 | 3 | 79 | 3 | 92 | 3 | 51 | 2 | 25 | 2 | 69 | 2 | 4 | 1 | 71 | 1 |
| 9 | 17 | 62 | 3300 | 0 | 0 | 230 | 0 | 90 | 0 | 230 | 2740 | 50 | 770 | 81 | 2 | 85 | 2 | 92 | 2 | 82 | 2 | 79 | 1 | 97 | 1 | 73 | 1 | 87 | 1 | 71 | 1 | | |

**NATIONAL WATER QUALITY NETWORK**

# PLANKTON POPULATION

| | |
|---|---|
| **STATE** | MONTANA |
| **MAJOR BASIN** | MISSOURI RIVER |
| **MINOR BASIN** | YELLOWSTONE RIVER |
| **STATION LOCATION** | YELLOWSTONE RIVER NEAR<br>SIDNEY, MONTANA |

055

| DATE OF SAMPLE | | | DOMINANT SPECIES OF DIATOMS AND PERCENT OF TOTAL DIATOMS (See text for Codes) | | | | | | | | | FUNGI AND SHEATHED BACTERIA Number per ml. | MICROINVERTEBRATES | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1ST | | 2ND | | 3RD | | 4TH | | OTHER SPECIES PERCENT | | PROTOZOA (Identifiable) Number per ml. | ROTIFERS | | | | | | | | | | | CRUSTACEA | | | | | | | NEMATODES (Identifiable) Number per liter | OTHER ANIMAL FORMS (Number per liter) |
| | | | | | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | | | | NUMBER PER LITER | GENERA AND COUNT LEVEL (See text for Codes) | | | | | | | |
| | | | | | | | | | | | | | | | 1ST | | 2ND | | 3RD | | 4TH | | 5TH | | | 1ST | | 2ND | | 3RD | | | |
| MONTH | DAY | YEAR | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | SPECIES | PERCENT | | | | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | GENUS | COUNT LEVEL | | |
| 10 | 2 | 61 | 92 | 34 | 41 | 7 | 36 | 6 | 15 | 6 | 47 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 10 | 16 | 61 | 92 | 27 | 41 | 12 | 36 | 8 | 15 | 8 | 45 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 6 | 61 | 92 | 57 | 36 | 26 | 71 | 2 | 15 | 2 | 13 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 11 | 20 | 61 | 92 | 56 | 36 | 17 | 65 | 7 | 71 | 2 | 18 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 4 | 61 | 92 | 36 | 36 | 10 | 65 | 7 | 86 | 6 | 41 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 12 | 18 | 61 | 86 | 52 | 92 | 20 | 36 | 7 | 65 | 3 | 18 | 50 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 1 | 62 | 92 | 50 | 86 | 28 | 65 | 8 | 71 | 2 | 12 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 1 | 15 | 62 | 86 | 17 | 92 | 15 | 65 | 13 | 36 | 11 | 44 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 5 | 62 | 92 | 22 | 36 | 19 | 65 | 5 | 16 | 3 | 51 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 2 | 19 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 5 | 62 | 65 | 14 | 36 | 13 | 92 | 12 | 66 | 6 | 55 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 3 | 19 | 62 | 92 | 15 | 36 | 12 | 65 | 10 | 71 | 7 | 56 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | [illegible] | [illegible] |
| 4 | 2 | 62 | | | | | | | | | | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | [illegible] | [illegible] |
| 4 | 16 | 62 | 92 | 40 | 36 | 15 | 80 | 9 | 65 | 6 | 30 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 7 | 62 | 92 | 23 | 36 | 19 | 65 | 13 | 80 | 11 | 34 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 5 | 21 | 62 | 92 | 17 | 36 | 16 | 80 | 10 | 65 | 10 | 47 | 40 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 4 | 62 | 92 | 25 | 36 | 18 | 65 | 12 | 71 | 8 | 37 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 6 | 18 | 62 | 92 | 36 | 36 | 16 | 42 | 5 | 71 | 5 | 38 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 7 | 2 | 62 | 92 | 23 | 36 | 19 | 97 | 5 | 71 | 4 | 49 | 20 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 8 | 6 | 62 | 92 | 30 | 36 | 23 | 65 | 7 | 97 | 5 | 35 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 8 | 20 | 62 | 36 | 26 | 92 | 15 | 65 | 9 | 26 | 6 | 44 | 0 | 0 | - | | | | | | | | | | | - | | | | | | | - | - |
| 9 | 4 | 62 | 26 | 14 | 16 | 11 | 92 | 10 | 36 | 8 | 57 | 0 | 0 | 0 | | | | | | | | | | | 0 | | | | | | | 0 | 0 |
| 9 | 17 | 62 | 36 | 11 | 58 | 10 | 16 | 8 | 31 | 8 | 63 | 20 | 0 | 0 | | | | | | | | | | | - | | | | | | | - | - |

## NATIONAL WATER QUALITY NETWORK

# ORGANIC CHEMICALS

RECOVERED BY CARBON FILTER TECHNIQUE

*RESULTS IN MICROGRAMS PER LITER*
*(Parts per billion)*

**STATE** MONTANA

**MAJOR BASIN** MISSOURI RIVER

**MINOR BASIN** YELLOWSTONE RIVER

**STATION LOCATION** YELLOWSTONE RIVER NEAR
SIDNEY, MONTANA

| DATE OF SAMPLE | | | | | GALLONS FILTERED | EXTRACTABLES | | | CHLOROFORM EXTRACTABLES | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGINNING | | | END | | | | | | | | NEUTRALS | | | | | | | | |
| MONTH | DAY | YEAR | MONTH | DAY | | TOTAL | CHLORO-FORM | ALCOHOL | ETHER INSOLUBLES | WATER SOLUBLES | TOTAL | ALIPHATICS | AROMATICS | OXYGEN-ATED COMPOUNDS | LOSS | WEAK ACIDS | STRONG ACIDS | BASES | LOSS |
| 10 | 2 | 61 | 10 | 9 | 5000# | 62 | 10 | 52 | - | - | - | - | - | - | - | - | - | - | - |
| 11 | 6 | 61 | 11 | 13 | 5000# | 65 | 13 | 52 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 4 | 61 | 12 | 11 | 5000# | 93 | 30 | 63 | - | - | - | - | - | - | - | - | - | - | - |
| 12 | 4 | 61 | | * | 15000# | 74 | 18 | 56 | 0 | 3 | 10 | 4 | 1 | 5 | 0 | 2 | 1 | 0 | 2 |
| 1 | 2 | 62 | 1 | 9 | 5000# | 113 | 33 | 80 | - | - | - | - | - | - | - | - | - | - | - |
| 2 | 5 | 62 | 2 | 12 | 5000# | 137 | 63 | 74 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 5 | 62 | 3 | 12 | 5000# | 156 | 50 | 106 | - | - | - | - | - | - | - | - | - | - | - |
| 3 | 5 | 62 | | * | 15000# | 136 | 49 | 87 | 2 | 14 | 18 | 2 | 1 | 14 | 1 | 5 | 4 | 1 | 5 |
| 4 | 3 | 62 | 4 | 10 | 5000# | 79 | 21 | 58 | - | - | - | - | - | - | - | - | - | - | - |
| 4 | 30 | 62 | 5 | 8 | 3000# | 96 | 39 | 57 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 4 | 62 | 6 | 6 | 1500# | 81 | 27 | 54 | - | - | - | - | - | - | - | - | - | - | - |
| 6 | 4 | 62 | | * | 9500# | 85 | 28 | 57 | 1 | 7 | 11 | 4 | 1 | 6 | 0 | 3 | 2 | 0 | 4 |
| 7 | 9 | 62 | 7 | 1[illegible] | [illegible]0# | 45 | 15 | 30 | - | - | - | - | - | - | - | - | - | - | - |
| 8 | 6 | 62 | 8 | 13 | 5000# | 68 | 17 | 51 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 10 | 62 | 9 | 17 | 5000# | 65 | 14 | 51 | - | - | - | - | - | - | - | - | - | - | - |
| 9 | 10 | 62 | | * | 15000# | 59 | 15 | 44 | 1 | 3 | 6 | 1 | 1 | 4 | 0 | 2 | 1 | 0 | 2 |

# ESTIMATED

**NATIONAL WATER QUALITY NETWORK**

## CHEMICAL, PHYSICAL AND BACTERIOLOGICAL ANALYSES

**STATE** MONTANA
**MAJOR BASIN** MISSOURI RIVER
**MINOR BASIN** YELLOWSTONE RIVER
**STATION LOCATION** YELLOWSTONE RIVER NEAR
SIDNEY, MONTANA

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 10 | 2 | 61 | 9.3 | 11.0 | 8.2 | - | - | - | - | - | 74 | 156 | 280 | - | 1875 | 272 | - | 592 | - |
| 10 | 9 | 61 | 8.6 | 10.5 | 8.3 | - | 17 | - | - | - | 12 | 154 | 300 | - | 600 | 237 | - | 592 | - |
| 10 | 16 | 61 | 12.0 | 9.7 | 8.3 | - | - | 1.6 | 6.1 | - | 20 | 164 | 308 | - | 1300 | 275 | - | 666 | - |
| 10 | 23 | 61 | 5.8 | 12.0 | 8.1 | - | - | 1.5 | 6.2 | - | 11 | 150 | 256 | - | 1700 | 270 | - | 677 | - |
| 10 | 30 | 61 | 3.0 | 12.6 | 8.2 | - | - | 1.0 | 3.9 | - | 22 | 154 | 252 | - | 500 | 225 | - | 736 | - |
| 11 | 6 | 61 | 4.5 | 12.7 | 8.2 | - | - | 1.1 | 5.4 | - | 14 | 156 | 260 | - | 200 | 280 | - | 556 | - |
| 11 | 13 | 61 | 7.7 | 11.5 | 8.1 | - | 19 | 1.4 | - | - | 38 | 166 | 270 | - | 800 | - | - | 564 | - |
| 11 | 20 | 61 | 6.0 | 11.8 | 8.2 | - | - | 1.7 | - | - | 10 | 156 | 276 | 0 | 600 | 204 | .1 | 582 | - |
| 11 | 27 | 61 | 4.0 | - | 8.2 | - | - | - | - | - | 8 | 154 | 255 | - | 240 | 193 | .1 | 536 | - |
| 12 | 4 | 61 | 9.0 | 11.1 | 8.2 | - | - | 1.1 | 7.0 | - | 13 | 174 | 282 | 5 | 170 | 234 | .1 | 624 | - |
| 12 | 11 | 61 | 6.0 | - | 8.2 | - | 11 | - | - | - | 6 | 190 | 308 | - | 45 | 234 | .1 | 644 | - |
| 12 | 18 | 61 | 6.8 | 10.8 | 8.1 | - | - | 1.3 | 3.3 | - | 14 | 212 | 352 | 7 | 30 | 295 | .0 | 750 | - |
| 12 | 26 | 61 | 3.4 | 10.4 | 7.9 | - | - | 1.3 | - | - | 12 | 240 | 396 | 5 | 55 | 340 | - | 812 | - |
| 1 | 2 | 62 | 6.0 | - | 8.0 | - | - | - | - | - | 6 | 184 | 292 | - | 55 | 225 | - | 584 | - |
| 1 | 8 | 62 | 4.0 | 11.0 | 7.9 | - | 7 | 1.3 | 3.5 | - | 28 | 162 | 264 | 6 | 70 | 193 | - | - | - |
| 1 | 15 | 62 | 5.5 | 10.5 | 7.9 | - | - | 1.2 | - | - | 4 | 180 | 290 | 6 | 40 | 183 | - | 554 | - |
| 1 | 22 | 62 | 6.0 | 10.5 | 8.0 | - | - | 1.2 | - | - | 10 | 214 | 364 | 5 | 45 | 246 | - | 754 | - |
| 1 | 29 | 62 | 6.0 | 9.7 | 7.9 | - | - | .6 | 1.3 | - | 34 | 212 | 348 | 5 | 50 | 234 | - | 694 | - |
| 2 | 5 | 62 | 6.0 | 11.3 | 7.9 | - | - | 1.9 | - | - | 6 | 156 | 260 | 16 | 440 | 210 | - | 520 | - |
| 2 | 12 | 62 | 6.0 | 10.7 | 7.9 | - | 18 | 1.0 | 6.9 | - | 12 | 118 | 200 | 20 | 260 | - | - | 410 | - |
| 2 | 19 | 62 | 2.4 | 10.0 | 7.8 | - | - | - | - | - | 38 | 124 | 268 | 18 | 2500 | 204 | - | 604 | - |
| 2 | 26 | 62 | 5.7 | 12.8 | 8.0 | - | - | 2.3 | 6.4 | - | 28 | 130 | 288 | 18 | 60 | 214 | - | 602 | - |
| 3 | 5 | 62 | 6.0 | 11.0 | 7.9 | - | - | 2.7 | 5.9 | - | 32 | 174 | 356 | 16 | 55 | 234 | - | 688 | - |
| 3 | 12 | 62 | 6.0 | 11.7 | 8.1 | - | 15 | 1.2 | 3.7 | - | 38 | 218 | 394 | - | 50 | 316 | - | 804 | - |
| 3 | 19 | 62 | 10.0 | 11.0 | 8.0 | - | - | 1.6 | 2.7 | - | 12 | 154 | 274 | - | 85 | 193 | - | 574 | - |
| 3 | 26 | 62 | 3.2 | 11.4 | 8.0 | - | - | - | - | - | 23 | 104 | 216 | 18 | 1800 | 195 | - | 486 | - |
| 4 | 2 | 62 | 4.0 | 13.9 | 8.1 | - | - | - | - | - | 38 | 152 | 278 | - | 2700 | 234 | - | 606 | - |
| 4 | 9 | 62 | 7.3 | 14.7 | 8.3 | - | 18 | 1.4 | - | - | 18 | 176 | 314 | 6 | 750 | 290 | - | - | - |
| 4 | 16 | 62 | 11.5 | 10.0 | 8.3 | - | - | 2.0 | 6.5 | - | 20 | 184 | 338 | 10 | 700 | 280 | .0 | 760 | - |
| 4 | 23 | 62 | 15.0 | 8.9 | 8.3 | - | - | 1.7 | - | - | 14 | 156 | 268 | - | 850 | 204 | - | - | - |
| 4 | 30 | 62 | 12.8 | 9.4 | 8.1 | - | - | - | - | - | 11 | 112 | 180 | 20 | 2250 | 125 | - | 374 | - |
| 5 | 7 | 62 | 14.5 | - | 8.1 | - | 0 | - | - | - | 3 | 118 | 200 | - | 1125 | 103 | - | 410 | - |
| 5 | 14 | 62 | 14.5 | 9.2 | 8.0 | - | - | 3.6 | 8.2 | - | - | 102 | 128 | 32 | 4500 | 76 | - | 320 | - |
| 5 | 21 | 62 | 15.7 | 8.8 | 8.1 | - | - | 2.1 | 8.3 | - | - | 96 | 150 | 16 | 450 | - | - | 300 | - |
| 5 | 28 | 62 | 12.0 | 9.2 | 7.9 | - | - | 2.2 | - | - | - | 98 | 254 | 32 | 14000 | 163 | - | 552 | - |
| 6 | 4 | 62 | 18.6 | - | 7.9 | - | - | - | - | - | - | 102 | 186 | - | 4500 | 123 | - | 370 | - |
| 6 | 11 | 62 | 21.8 | - | 7.9 | - | - | - | - | - | - | 90 | 164 | - | 2500 | 69 | - | 344 | - |
| 6 | 18 | 62 | 19.2 | - | 7.8 | - | - | - | - | - | - | 74 | 130 | - | 3000 | 69 | - | 258 | - |
| 6 | 25 | 62 | 21.0 | 7.4 | 7.8 | - | - | 3.4 | - | - | - | 66 | 136 | 14 | 3000 | 24 | - | 278 | - |

**STATION LOCATION** YELLOWSTONE RIVER NEAR SIDNEY, MONTANA

| DATE OF SAMPLE | | | TEMP. (Degrees Centigrade) | DISSOLVED OXYGEN mg/l | pH | B.O.D. mg/l | C.O.D. mg/l | CHLORINE DEMAND | | AMMONIA-NITROGEN mg/l | CHLORIDES mg/l | ALKALINITY mg/l | HARDNESS mg/l | COLOR (scale units) | TURBIDITY (scale units) | SULFATES mg/l | PHOSPHATES mg/l | TOTAL DISSOLVED SOLIDS mg/l | COLIFORMS per 100 ml. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MONTH | DAY | YEAR | | | | | | 1-HOUR mg/l | 24-HOUR mg/l | | | | | | | | | | |
| 7 | 2 | 62 | 22.9 | - | 8.1 | - | - | - | - | - | 5 | 72 | 102 | - | 1000 | 33 | .0 | 186 | - |
| 7 | 9 | 62 | 22.7 | 7.0 | 8.1 | - | - | 2.2 | 11.4 | - | - | 74 | 130 | 12 | 1300 | 50 | - | 260 | - |
| 7 | 16 | 62 | 20.0 | - | 8.2 | - | 94 | - | - | - | 16 | 90 | 144 | 43 | 13000 | 32 | - | - | - |
| 7 | 23 | 62 | 23.5 | - | 8.2 | - | - | - | - | - | 18 | 104 | 176 | 14 | 2000 | - | - | - | - |
| 7 | 30 | 62 | 21.8 | 8.0 | 8.4 | - | - | 1.6 | 6.6 | - | 8 | 110 | 192 | 12 | 700 | 76 | .0 | 398 | - |
| 8 | 6 | 62 | 22.7 | - | 8.3 | - | - | - | - | - | 15 | 124 | 228 | - | 2300 | 114 | - | 484 | - |
| 8 | 13 | 62 | 22.9 | - | 8.2 | - | 17 | - | - | - | - | 122 | 206 | - | 850 | 123 | - | 448 | - |
| 8 | 20 | 62 | 22.6 | - | 8.2 | - | - | - | - | - | - | 140 | 238 | - | 1200 | 142 | - | 496 | - |
| 8 | 27 | 62 | 21.3 | 8.8 | 8.4 | - | - | 1.6 | 6.8 | - | - | 124 | 224 | 7 | 200 | 134 | - | 512 | - |
| 9 | 3 | 62 | 15.8 | - | 8.4 | - | - | - | - | - | - | 142 | 254 | - | 400 | 174 | - | 466 | - |
| 9 | 10 | 62 | 15.2 | - | 8.6 | - | - | - | - | - | 13 | 154 | 254 | - | 225 | 163 | .0 | 560 | - |
| 9 | 17 | 62 | 15.8 | 18.9 | 8.5 | - | - | 1.2 | 4.4 | - | 11 | 160 | 260 | 14 | 275 | 153 | .0 | 734 | - |

## STREAM FLOW DATA - 1961-1962

Thousand Cubic Feet per Second

PROVISIONAL--SUBJECT TO REVISION

Gaging Station near Sidney, Montana
Operated by U.S. Geological Survey

| | |
|---|---|
| STATE | Montana |
| MAJOR BASIN | Missouri River |
| MINOR BASIN | Yellowstone River |
| STATION LOCATION | Yellowstone River near Sidney, Montana |

| Day | October | November | December | January | February | March | April | May | June | July | August | September |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 8.370 | 8.800 | 6.900 | 6.400 | 5.300 | 5.400 | 14.000 | 19.400 | 30.400 | 52.800 | 14.100 | 6.520 |
| 2 | 8.310 | 8.370 | 6.900 | 6.500 | 6.400 | 4.600 | 13.000 | 17.800 | 31.700 | 48.100 | 13.300 | 6.840 |
| 3 | 8.420 | 7.960 | 6.800 | 6.500 | 7.200 | 4.000 | 12.000 | 16.100 | 32.600 | 43.200 | 12.600 | 7.540 |
| 4 | 8.420 | 7.800 | 6.600 | 6.600 | 8.400 | 3.400 | 12.000 | 14.400 | 30.100 | 39.900 | 13.800 | 7.710 |
| 5 | 8.450 | 8.000 | 6.200 | 6.600 | 9.200 | 3.500 | 11.200 | 12.900 | 38.800 | 37.000 | 13.800 | 7.510 |
| 6 | 8.080 | 8.300 | 6.000 | 6.600 | 9.800 | 3.700 | 10.600 | 11.600 | 44.600 | 36.500 | 13.500 | 7.400 |
| 7 | 7.850 | 8.400 | 5.600 | 6.600 | 10.000 | 3.900 | 10.500 | 10.500 | 47.500 | 33.000 | 13.200 | 7.350 |
| 8 | 7.680 | 8.400 | 5.000 | 6.500 | 11.000 | 4.500 | 9.540 | 9.990 | 45.400 | 30.300 | 12.500 | 7.460 |
| 9 | 7.850 | 8.300 | 4.600 | 6.400 | 11.000 | 5.200 | 9.010 | 12.300 | 36.600 | 27.100 | 11.800 | 7.680 |
| 10 | 8.510 | 8.250 | 4.000 | 6.400 | 10.000 | 6.000 | 8.740 | 14.100 | 31.100 | 26.600 | 12.000 | 7.960 |
| 11 | 9.070 | 8.340 | 3.000 | 6.400 | 9.800 | 7.000 | 8.220 | 14.900 | 28.000 | 25.800 | 11.300 | 8.540 |
| 12 | 9.070 | 8.510 | 2.000 | 6.300 | 10.000 | 8.000 | 8.250 | 16.700 | 26.900 | 23.000 | 10.300 | 8.920 |
| 13 | 9.010 | 8.310 | 1.600 | 6.200 | 11.000 | 8.600 | 9.070 | 19.900 | 28.600 | 21.500 | 10.300 | 9.380 |
| 14 | 10.900 | 8.480 | 1.100 | 5.000 | 12.000 | 9.000 | 8.770 | 23.200 | 37.600 | 23.600 | 12.300 | 9.670 |
| 15 | 10.800 | 8.570 | .700 | 4.000 | 13.000 | 9.400 | 8.800 | 24.800 | 50.300 | 32.200 | 12.200 | 9.480 |
| 16 | 9.640 | 8.600 | 1.000 | 2.900 | 16.000 | 9.600 | 8.740 | 25.000 | 58.700 | 36.800 | 11.100 | 9.290 |
| 17 | 9.190 | 8.400 | 1.200 | 2.600 | 20.000 | 9.900 | 8.450 | 23.000 | 57.000 | 43.900 | 10.100 | 9.320 |
| 18 | 8.980 | 8.020 | 1.000 | 2.600 | 30.000 | 10.000 | 8.800 | 21.100 | 59.000 | 37.000 | 9.320 | 9.450 |
| 19 | 8.920 | 8.280 | 1.000 | 2.700 | 18.000 | 11.000 | 9.510 | 19.800 | 69.700 | 38.300 | 8.370 | 9.260 |
| 20 | 8.720 | 7.820 | 2.000 | 2.900 | 13.000 | 12.000 | 10.600 | 18.300 | 73.200 | 30.700 | 7.650 | 8.720 |
| 21 | 8.920 | 6.280 | 3.800 | 3.100 | 11.000 | 16.000 | 11.300 | 17.600 | 69.900 | 24.200 | 7.320 | 8.400 |
| 22 | 9.220 | 5.780 | 6.000 | 3.300 | 9.700 | 25.000 | 11.700 | 17.700 | 63.500 | 21.200 | 6.980 | 8.050 |
| 23 | 9.130 | 6.300 | 6.600 | 3.600 | 9.200 | 28.000 | 12.600 | 21.200 | 61.600 | 19.400 | 7.040 | 7.910 |
| 24 | 8.890 | 7.010 | 6.800 | 3.700 | 8.600 | 27.000 | 15.100 | 20.800 | 57.800 | 17.600 | 6.600 | 7.710 |
| 25 | 8.890 | 8.450 | 6.700 | 3.800 | 8.000 | 24.000 | 17.000 | 20.200 | 54.200 | 16.000 | 6.170 | 7.850 |
| 26 | 9.100 | 8.800 | 6.600 | 4.000 | 7.200 | 21.000 | 16.900 | 23.700 | 52.500 | 14.700 | 6.360 | 8.720 |
| 27 | 8.800 | 7.000 | 6.600 | 4.200 | 6.600 | 20.000 | 16.500 | 29.300 | 53.800 | 13.800 | 6.790 | 9.010 |
| 28 | 8.250 | 6.400 | 6.500 | 4.300 | 6.000 | 18.000 | 17.600 | 27.100 | 54.200 | 13.100 | 7.210 | 8.860 |
| 29 | 8.250 | 6.600 | 6.400 | 4.400 | | 17.000 | 19.900 | 37.400 | 53.900 | 12.800 | 6.870 | 9.220 |
| 30 | 8.220 | 6.800 | 6.400 | 4.600 | | 16.000 | 20.500 | 42.200 | 53.800 | 13.700 | 6.440 | 9.190 |
| 31 | 8.420 | | 6.400 | 4.800 | | 15.000 | | 36.600 | | 14.300 | 6.360 | |

# *Strontium 90*

# Strontium 90

Strontium 90 Activity, μμc/liter—1961–1962

| Sampling Point | October–December | January–March | April–June | July–September |
|---|---|---|---|---|
| ALLEGHENY RIVER | | | | |
| at Pittsburgh, Pa. | 0. 6 | 1. 7 | 1. 2 | 2. 1 |
| ANIMAS RIVER | | | | |
| at Cedar Hill, N. Mex. | . 9 | . 8 | 1. 0 | . 4 |
| APALACHICOLA RIVER | | | | |
| at Chattahoochee, Fla. | . 5 | . 9 | . 9 | . 4 |
| ARKANSAS RIVER | | | | |
| at Pendleton Ferry, Ark. | . 5 | 1. 3 | — | — |
| near Ponca City, Okla. | . 6 | 1. 3 | 3. 0 | 4. 8 |
| at Coolidge, Kans. | 1. 0 | . 6 | 3. 9 | 2. 6 |
| BEAR RIVER | | | | |
| above Preston, Idaho | — | — | — | 1. 3 |
| BIG HORN RIVER | | | | |
| at Hardin, Mont. | — | 1. 5 | 6. 4 | 3. 7 |
| BIG SIOUX RIVER | | | | |
| below Sioux Falls, S. Dak. | 1. 2 | 2. 0 | 5. 9 | 5. 4 |
| CHATTAHOOCHE RIVER | | | | |
| at Columbus, Ga. | . 1 | . 6 | — | . 8 |
| at Lanett, Ala. | — | — | — | 1. 5 |
| at Atlanta, Ga. | . 3 | . 5 | . 8 | . 7 |
| CHENA SLOUGH | | | | |
| at Fairbanks, Alaska | — | — | 1. 4 | . 4 |
| CLEARWATER RIVER | | | | |
| at Lewiston, Idaho | . 3 | . 5 | . 4 | . 5 |

| Sampling Point | October–December | January–March | April–June | July–September |
|---|---|---|---|---|
| CLINCH RIVER | | | | |
| above Kingston, Tenn. | — | — | 1. 7 | 12. 6 |
| at Clinton, Tenn. | — | — | — | 1. 3 |
| COLORADO RIVER | | | | |
| at Yuma, Ariz. | 0. 7 | 0. 6 | 1. 0 | 1. 2 |
| above Parker Dam, Ariz.–Calif. | 1. 5 | 1. 0 | 1. 7 | 1. 7 |
| near Boulder City, Nev. | 1. 8 | 1. 3 | 2. 0 | 1. 7 |
| at Page, Ariz. | 1. 9 | 1. 5 | 4. 9 | 1. 5 |
| at Loma, Colo. | . 8 | 1. 2 | 1. 5 | . 8 |
| COLUMBIA RIVER | | | | |
| at Clatskanie, Oreg. | . 6 | . 7 | . 7 | . 6 |
| at Bonneville, Oreg. | . 8 | 1. 1 | 1. 6 | . 4 |
| at McNary Dam, Oreg. | . 6 | . 9 | . 7 | 1. 4 |
| at Pasco, Wash. | . 7 | 1. 1 | . 8 | 1. 8 |
| at Wenatachee, Wash. | . 7 | . 9 | . 8 | 1. 2 |
| at Northport, Wash. | — | — | . 6 | 1. 3 |
| CONNECTICUT RIVER | | | | |
| at Enfield Dam, Conn. | — | — | — | 1. 4 |
| below Northfield, Mass. | . 4 | . 6 | 1. 0 | 1. 3 |
| at Wilder, Vt. | 3. 7 | . 8 | . 8 | 1. 4 |
| CUMBERLAND RIVER | | | | |
| at Clarksville, Tenn. | . 9 | — | — | — |
| DELAWARE RIVER | | | | |
| at Philadelphia, Pa. | — | . 7 | 1. 3 | 1. 6 |
| at Trenton, N.J. | . 7 | 1. 0 | 1. 6 | 1. 5 |
| at Martins Creek, Pa. | . 5 | . 7 | 1. 1 | . 5 |
| ESCAMBIA RIVER | | | | |
| at Century, Fla. | . 5 | . 4 | 1. 1 | 1. 0 |

## Strontium 90—Continued

### Strontium 90 Activity, $\mu\mu c$/liter—1961–1962

| Sampling Point | October–December | January–March | April–June | July–September |
|---|---|---|---|---|
| GREAT LAKES | | | | |
| Lake Erie at Buffalo, N.Y. | 0.8 | 1.0 | 1.1 | 1.3 |
| Lake Huron, Detroit River at Detroit, Mich. | .4 | 1.1 | 1.2 | 1.5 |
| Lake Huron, St. Clair River at Port Huron, Mich. | .8 | .8 | 1.3 | 1.0 |
| Lake Michigan at Gary, Ind. | .1 | .9 | .7 | 1.0 |
| Lake Michigan at Milwaukee, Wis. | .8 | .5 | .7 | 2.1 |
| Lake Superior, at St. Mary's River at Sault Ste. Marie, Mich. | .5 | .5 | .6 | .9 |
| Lake Superior at Duluth, Minn. | .1 | .8 | .5 | .7 |
| GREEN RIVER | | | | |
| at Dutch John, Utah | — | — | — | 1.9 |
| HUDSON RIVER | | | | |
| below Poughkeepsie, N.Y. | 2.5 | 1.1 | 1.7 | 1.7 |
| ILLINOIS RIVER | | | | |
| near Grafton, Ill. | .6 | 2.5 | 2.4 | 1.4 |
| at Peoria, Ill. | .7 | 1.0 | 1.7 | 2.0 |
| KANAWHA RIVER | | | | |
| at Winfield Dam, W. Va. | .5 | .4 | .8 | 1.3 |
| KLAMATH RIVER | | | | |
| near Keno, Oreg. | 1.2 | 1.1 | 1.3 | 2.8 |
| LITTLE MIAMI RIVER | | | | |
| at Cincinnati, Ohio | .6 | 1.3 | 2.9 | .9 |

| Sampling Point | October–December | January–March | April–June | July– |
|---|---|---|---|---|
| MERRIMACK RIVER | | | | |
| above Lowell, Mass. | — | — | — | — |
| MISSISSIPPI RIVER | | | | |
| at New Orleans, La. | 0.7 | 1.4 | 2.3 | |
| at Vicksburg, Miss. | .7 | 2.0 | 3.1 | |
| at Delta, La. | 1.8 | 1.0 | 1.9 | |
| at West Memphis, Ark. | 1.1 | 1.5 | 2.7 | |
| at Cape Girardeau, Mo. | 1.0 | 1.4 | 2.8 | |
| at East St. Louis, Ill. | .9 | 1.2 | 2.2 | |
| at Burlington, Iowa | 1.9 | 1.0 | 2.0 | |
| at Dubuque, Iowa | .8 | .7 | 2.9 | — |
| below St. Paul, Minn. | .6 | 1.3 | 3.9 | |
| MISSOURI RIVER | | | | |
| at St. Louis, Mo. | 2.1 | 1.3 | 2.7 | |
| at Missouri City, Mo. | — | 1.5 | 2.8 | |
| at Kansas City, Kans. | .9 | .5 | 1.8 | |
| at St. Joseph, Mo. | .5 | 1.1 | 3.0 | |
| at Omaha, Nebr. | .7 | 1.0 | 4.2 | |
| at Yankton, S. Dak. | 2.5 | .7 | 2.3 | |
| at Bismarck, N. Dak. | 1.1 | 1.4 | 1.9 | |
| at Williston, N. Dak. | 1.2 | 1.4 | 1.1 | |
| MONONGAHELA RIVER | | | | |
| at Pittsburgh, Pa. | 1.3 | .7 | .9 | |
| NORTH PLATTE RIVER | | | | |
| above Henry, Nebr. | 1.3 | .5 | 2.2 | |

# Strontium 90—Continued

Strontium 90 Activity, $\mu\mu c$/liter—1961–1962

| Sampling Point | October–December | January–March | April–June | July–September |
|---|---|---|---|---|
| OHIO RIVER | | | | |
| at Cairo, Ill. | — | 1.4 | 2.0 | 1.4 |
| at Evansville, Ind. | 0.9 | 1.0 | 1.4 | 1.3 |
| at Louisville, Ky. | .7 | 1.3 | 1.3 | 3.3 |
| at Cincinnati, Ohio | .6 | 1.2 | 1.9 | 1.5 |
| at Huntington, W. Va. | 1.0 | .6 | 1.9 | 1.5 |
| below Addison, Ohio | — | — | — | 1.3 |
| at East Liverpool, Ohio | — | 1.2 | 1.5 | — |
| OUACHITA RIVER | | | | |
| at Bastrop, La. | .7 | 2.0 | 1.6 | 1.0 |
| PEND OREILLE RIVER | | | | |
| at Albeni Falls Dam, Idaho | — | — | 1.6 | .5 |
| PLATTE RIVER | | | | |
| above Plattsmouth, Nebr. | .4 | 2.2 | 6.0 | 4.1 |
| POTOMAC RIVER | | | | |
| at Great Falls, Md. | .6 | 1.1 | 2.2 | 1.2 |
| at Williamsport, Md. | .9 | .5 | .9 | 1.2 |
| RAINY RIVER | | | | |
| at Baudette, Minn. | — | 1.4 | 1.4 | 1.7 |
| at International Falls, Minn. | .3 | 1.4 | 2.4 | 1.4 |
| RARITAN RIVER | | | | |
| at Perth Amboy, N.J. | — | — | — | — |
| RED RIVER (North) | | | | |
| at Grand Forks, N. Dak. | 1.1 | — | — | — |
| RED RIVER (South) | | | | |
| at Alexandria, La. | 2.7 | 1.1 | 2.5 | 2.0 |
| at Bossier City, La. | — | — | — | 2.2 |
| at Index, Ark. | 1.7 | 2.1 | 6.1 | — |
| at Denison, Tex. | 2.2 | 2.2 | 2.2 | 1.1 |
| RIO GRANDE | | | | |
| at Brownsville, Tex. | .6 | .9 | 1.2 | .7 |
| at Laredo, Tex. | .6 | .4 | 2.0 | 1.8 |
| at El Paso, Tex. | — | .5 | 1.2 | 1.7 |
| below Alamosa, Colo. | — | .6 | 1.1 | .5 |
| ROANOKE RIVER | | | | |
| at John H. Kerr Reservoir and Dam, Va. | .6 | .6 | 2.5 | 1.8 |
| SABINE RIVER | | | | |
| near Ruliff, Tex. | .7 | 1.3 | 1.7 | 1.0 |
| SACRAMENTO RIVER | | | | |
| at Greens Landing above Courtland, Calif. | — | — | .9 | .8 |
| ST. LAWRENCE RIVER | | | | |
| at Massena, N.Y. | 1.6 | .8 | 1.2 | .3 |
| SAN JOAQUIN RIVER | | | | |
| near Vernalis, Calif. | — | — | — | .7 |
| SAN JUAN RIVER | | | | |
| at Shiprock, N. Mex. | 1.3 | 1.9 | 1.0 | 1.0 |

# Strontium 90—Continued

Strontium 90 Activity, μμc/liter—1961–1962

| Sampling Point | October–December | January–March | April–June | July–September |
|---|---|---|---|---|
| SAVANNAH RIVER | | | | |
| at Port Wentworth, Ga. | 0.7 | 0.9 | 1.9 | 2.2 |
| at North Augusta, S.C. | — | .8 | 1.0 | .8 |
| SCHUYLKILL RIVER | | | | |
| at Philadelphia, Pa. | — | .6 | 1.5 | 1.8 |
| SHENANDOAH RIVER | | | | |
| at Berryville, Va. | .2 | .4 | .9 | .4 |
| SHIP CREEK | | | | |
| at Anchorage, Alaska | — | — | .2 | — |
| SNAKE RIVER | | | | |
| at Ice Harbor Dam, Wash. | — | — | .9 | 1.1 |
| at Wawawai, Wash. | .2 | .9 | .6 | .9 |
| at Payette, Idaho | 2.5 | .3 | .6 | 1.1 |
| SOUTH PLATTE RIVER | | | | |
| at Julesburg, Colo. | 1.2 | .8 | 1.7 | 2.2 |
| SPOKANE RIVER | | | | |
| at Post Falls Dam, Idaho | — | — | .7 | .9 |
| SUSQUEHANNA RIVER | | | | |
| at Conowingo, Md. | .9 | .5 | 1.0 | 2.1 |
| at Sayre, Pa. | .2 | .9 | 1.2 | 1.0 |
| TENNESSEE RIVER | | | | |
| at Pickwick Landing, Tenn. | 0.4 | 1.3 | 1.7 | 1.1 |
| at Bridgeport, Ala. | 1.5 | 2.0 | 2.0 | .6 |
| at Chattanooga, Tenn. | .5 | .6 | 1.6 | 1.2 |
| at Lenoir City, Tenn. | — | 1.2 | 1.1 | 2.8 |
| TOMBIGBEE RIVER | | | | |
| below Columbus, Miss. | .2 | .9 | 1.4 | 1.6 |
| TRUCKEE RIVER | | | | |
| Calif.-Nev. border at Farad, Calif. | .1 | .8 | .9 | .7 |
| VERDIGRIS RIVER | | | | |
| at Nowata, Okla. | — | — | 3.1 | 2.3 |
| WABASH RIVER | | | | |
| at New Harmony, Ind. | — | 1.3 | 4.7 | 2.0 |
| WILLAMETTE RIVER | | | | |
| at Portland, Oreg. | — | — | — | .5 |
| YAKIMA RIVER | | | | |
| at Richland, Wash. | .6 | .6 | .4 | .3 |
| YELLOWSTONE RIVER | | | | |
| near Sidney, Mont. | 1.2 | 1.3 | 3.0 | 1.5 |

# *Trace Elements*

# TRACE ELEMENTS
## NATIONAL WATER QUALITY NETWORK
## 1960 - 1961

| STATION | DATE | | CONCENTRATION —— MILLIGRAMS PER LITER | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ANALYSIS BY WET OR FLAME METHOD | | | | | ANALYSIS BY SPECTROPHOTOGRAPHIC METHOD | | | | | | | | | | | | | | | |
| | FROM | TO | B | F | K | Na | Se | Cd | Ba | Be | Pb | Cr | Sn | Sb | Mn | Fe | Ni | Bi | Mo | V | Cu | Zn | Co | Ag |
| ALLEGHENY RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| at Pittsburgh, Pa. | 12-12-61 | 3-20-62 | .12 | - | - | - | .01* | .005* | .03 | .00008* | .008* | .002* | .003* | .02* | .03 | .08 | .003* | .008* | .003* | .003* | .006 | .8* | .003* | .00008* |
| | 3-21-62 | 8-22-62 | .02 | .35 | 3.3 | 13. | .01* | .006* | .05 | .001* | .01* | .002* | .006* | .02* | .006* | .006 | .006 | .01* | .006* | .006* | .005 | .06* | .006* | .0001* |
| ANIMAS RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| at Cedar Hill, N. Mexico | 12-12-61 | 3-20-62 | .18 | - | - | - | .01* | .01* | .04 | .0002* | .02* | .004* | .008* | .04* | .02* | .01 | .008* | .02* | .008 | .04 | .008 | 2.* | .008* | .0002* |
| | 5-14-62 | 9-18-62 | .03 | .51 | 3.6 | 19. | .01* | .007* | .04 | .002* | .02 | .003* | .007* | .03* | .007* | .007 | .007* | .02* | .007 | .03 | .01 | .07* | .007* | .0002* |
| APALACHICOLA RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| at Chattahoochee, Fla. | 12-12-61 | 3-20-62 | | .13 | 1.4 | 7. | .01* | .002* | .002* | .00004* | .004* | .0008* | .002* | .008* | .02 | .96 | .006 | .004* | .002* | .002* | .02 | .4* | .002* | .00004* |
| | 4-12-62 | 9-18-62 | .01* | .14 | 1.0 | 3. | .01* | .002* | .02 | .0004* | .004 | .0008* | .002* | .008* | .002* | .004 | .002* | .004* | .002* | .002* | .004 | .02* | .002* | .00004* |
| ARKANSAS RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| at Pendleton Ferry, Ark. | 12-12-61 | 3-20-62 | .12 | .00 | 2.5 | 58. | .01* | .01* | .02 | .0002* | .02* | .003* | .006* | .03* | .01* | .2 | .006* | .02* | .006* | .006* | .001 | 2.* | .006* | .0002* |
| near Ponca City, Okla. | 12-12-61 | 3-20-62 | .12 | .44 | 4.1 | 155. | .01* | .03* | .04 | .0004* | .04* | .009* | .02* | .09* | .04* | .02* | .02* | .04* | .02* | .02* | .003* | 4.* | .02* | .0004* |
| | 4-30-62 | 9-17-62 | .10 | .51 | 8.1 | 155. | .01* | .02* | .2 | .004* | .04* | .01 | .02* | .07* | .02* | .02 | .02* | .04* | .02 | .02 | .007* | .2* | .02* | .0004* |
| at Coolidge, Kansas | 12-12-61 | 3-20-62 | .74 | .78 | 10.2 | 525. | .01* | .1* | .08* | .002* | .2* | .04* | .08* | .4* | .2* | .08* | .08* | .2* | .08* | .08* | .01* | 20.* | .08* | .002* |
| | 5-1-62 | 10-8-62 | .60 | .56 | 15.0 | 400. | .01* | .07* | .07 | .014* | .1* | .03* | .07* | .3* | .07* | .07 | .07* | .2* | .07* | .07* | .03 | .7* | .07* | .001* |
| BEAR RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| above Preston, Idaho | 8-20-62 | 10-1-62 | .14 | .45 | 9.1 | 45. | .01* | .01* | .03 | .003* | .05 | .005* | .01* | .01* | .01* | .01 | .01* | .03* | .01* | .01* | .01 | .3 | .01* | .0003 |
| BIG HORN RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| at Hardin, Montana | 12-12-61 | 3-20-62 | .14 | .50 | 3.7 | 75. | .01* | .02* | .01* | .0003* | .03* | .006* | .01* | .06* | .02* | .16 | .01* | .03* | .01* | .01* | .01 | 3.* | .01* | .0003* |
| | 3-19-62 | 8-20-62 | .14 | .40 | 5.5 | 82. | .01* | .01* | .04 | .003* | .03* | .006* | .01* | .06* | .01* | .03 | .01* | .03* | .01* | .01* | .003 | .1* | .01* | .0003* |
| BIG SIOUX RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| below Sioux Falls, S. D. | 12-12-61 | 3-20-62 | .19 | .55 | 15.4 | 330. | .01* | .03* | .02* | .0006* | .06* | .01* | .02* | .1* | .04* | .03 | .02* | .06* | .02* | .02* | .008 | 6.* | .02* | .0006* |
| | 3-23-62 | 8-15-62 | .12 | .25 | 8.9 | 25. | .01* | .01* | .03* | .002* | .02* | .005* | .01* | .05* | .01* | .01 | .01* | .02* | .01* | .01* | .01 | .1* | .01* | .0002* |
| CHATTAHOOCHEE RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| at Columbus, Georgia | 12-12-61 | 3-20-62 | .08 | .13 | 1.6 | 5. | .01* | .001* | .0008* | .00002* | .002* | .003 | .0008* | .004* | .004 | .02 | .0008* | .002* | .0008* | .0008* | .004 | .2* | .0008* | .00008 |
| | 5-16-62 | 9-24-62 | .01* | .08 | 1.6 | 3. | .01* | .002* | .007 | .0003* | .003 | .001 | .002* | .007* | .002* | .01 | .002* | .003* | .002* | .002* | .007 | .03 | .002* | .00003* |
| at Lanett, Alabama | 7-30-62 | 9-17-62 | - | - | - | - | - | .001* | .006 | .0003* | .003* | .002 | .001* | .006* | .001* | .02 | .001* | .003* | .001* | .001* | .003 | .01 | .001* | .00003* |
| at Atlanta, Georgia | 12-13-61 | 3-11-62 | .04 | .13 | 1.6 | 3. | .01* | .0009* | .0006 | .00002* | .002* | .0009 | .0006* | .003* | .001* | .01 | .0006* | .002* | .0006* | .0006* | .002 | .2* | .0006* | .00002* |
| | 3-28-62 | 8-29-62 | .02* | .01* | 1.3 | 2. | .01* | .0004* | .003 | .0001* | .001* | .0004 | .0004* | .002* | .0004* | .004 | .0004* | .001* | .0004* | .0004* | .001 | .004 | .0004* | .00002 |
| CHENA SLOUGH | | | | | | | | | | | | | | | | | | | | | | | | |
| at Fairbanks, Alaska | 6-5-62 | 10-8-62 | .06 | .14 | 1.1 | 3. | .01* | .002* | .004 | .0004* | .004 | .0009* | .002* | .009* | .002* | .02 | .002* | .004* | .002* | .002* | .002 | .02* | .002* | .00004* |
| CLEARWATER RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| at Lewiston, Idaho | 12-12-61 | 3-20-62 | .03 | .18 | 1.6 | 6. | .01* | .002* | .03 | .00003* | .003 | .0006* | .001* | .006* | .003 | .03 | .001* | .003* | .003 | .001* | .002 | .3* | .001* | .00003* |
| | 5-1-62 | 9-4-62 | .05 | .20 | .6 | 4. | .01* | .001* | .003 | .0003* | .003* | .0005* | .001* | .005* | .001* | .03 | .001* | .003* | .001* | .001* | .003 | .01 | .001* | .00003* |
| CLINCH RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| at Clinton, Tennessee | 7-2-62 | 9-23-62 | .05 | .14 | 1.1 | 3. | .01* | .003* | .02 | .0006* | .006* | .001* | .003* | .01* | .003* | .06 | .004 | .006* | .003* | .003* | .03 | .03 | .003* | .00006* |
| above Kingston, Tenn. | 3-2-62 | 9-4-62 | .03 | .08 | 1.3 | 3. | .01* | .003* | .008 | .0006* | .006* | .002 | .003* | .01* | .003* | .003 | .003* | .006* | .003* | .003* | .003 | .03* | .003* | .002 |

✳ ACTUAL VALUE IS LESS THAN THE AMOUNT SHOWN REPORTED RESULT INDICATES LIMIT OF SENSITIVITY AT WHICH TEST WAS PERFORMED SEE TEXT FOR EXPLANATION.

# TRACE ELEMENTS

## NATIONAL WATER QUALITY NETWORK

## 1960 - 1961

| STATION | DATE |  | CONCENTRATION — MILLIGRAMS PER LITER |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | FROM | TO | ANALYSIS BY WET OR FLAME METHOD |  |  |  |  | ANALYSIS BY SPECTROPHOTOGRAPHIC METHOD |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | B | F | K | Na | Se | Cd | Ba | Be | Pb | Cr | Sn | Sb | Mn | Fe | Ni | Bi | Mo | V | Cu | Zn | Co | Ag |
| COLORADO RIVER<br>at Yuma, Arizona | 12-12-61<br>3-2-62 | 2-20-62<br>9-4-62 | .73<br>.73 | .74<br>.51 | 8.6<br>15.0 | 656.<br>500. | .01*<br>.01* | .09*<br>.06* | .06*<br>.06 | .002*<br>.01* | .2*<br>.1* | .03*<br>.02* | .06*<br>.06* | .3*<br>.2* | .05*<br>.06* | .06*<br>.06* | .06*<br>.06* | .2*<br>.1* | .06*<br>.06* | .06*<br>.06* | .009*<br>.01 | 20.*<br>.6* | .06*<br>.06* | .002*<br>.001* |
| above Parker Dam, Arizona-California | 12-12-61<br>5-7-62 | 3-20-62<br>9-17-62 | .17<br>.17 | .50<br>.40 | 5.0<br>6.5 | 101.<br>116. | .01*<br>.01* | .02*<br>.02* | .05<br>.11 | .0004*<br>.004* | .04*<br>.04* | .007*<br>.007* | .01*<br>.02* | .07*<br>.07* | .03*<br>.02* | .02<br>.3 | .01*<br>.02* | .04*<br>.04* | .02<br>.02 | .01*<br>.02 | .02<br>.03 | 4.*<br>.2* | .01*<br>.02* | .0004*<br>.0004* |
| near Boulder City, Nevada | 12-12-61<br>4-24-62 | 3-20-62<br>6-12-62 | .13<br>.14 | .46<br>.35 | 4.8<br>6.6 | 99.<br>110. | .01*<br>.01* | .02*<br>.02* | .04<br>.05 | .0004*<br>.004* | .04*<br>.04* | .007*<br>.007* | .01*<br>.02* | .07*<br>.07* | .03*<br>.02* | .01*<br>.02* | .01*<br>.02* | .04*<br>.04* | .02<br>.02 | .01*<br>.02* | .002<br>.02 | 4.*<br>.2* | .01*<br>.02* | .0004*<br>.0004* |
| at Page, Arizona | 12-12-61<br>7-23-62 | 3-20-62<br>9-17-62 | .14<br>.14 | .46<br>.35 | 5.0<br>6.1 | 105.<br>112. | .01*<br>.01* | .02*<br>.02* | .02<br>.15 | .0004*<br>.004* | .04*<br>.04* | .008*<br>.008* | .02*<br>.02* | .08*<br>.08* | .03*<br>.02* | .02<br>.04 | .02*<br>.02* | .04*<br>.04* | .03<br>.08 | .02*<br>.02* | .002<br>.008 | 4.*<br>.2* | .02*<br>.02* | .0004*<br>.0004 |
| at Loma, Colorado | 12-12-61<br>3-21-62 | 3-20-62<br>9-24-62 | .10<br>.06 | .50<br>.35 | 4.1<br>5.4 | 119.<br>100. | .01*<br>.01* | .02*<br>.02* | .02<br>.04 | .0004*<br>.004* | .04*<br>.04* | .02<br>.007* | .02*<br>.02* | .08*<br>.07* | .03*<br>.02* | .02<br>.04 | .02*<br>.02* | .04*<br>.04* | .04<br>.04 | .02*<br>.02* | .002*<br>.007 | 4.*<br>.2* | .02*<br>.02* | .0004*<br>.004 |
| COLUMBIA RIVER<br>at Clatskanie, Oregon | 12-12-61<br>5-7-62 | 3-20-62<br>9-17-62 | .06<br>.08 | .36<br>.20 | 1.9<br>1.4 | 7.<br>6. | .01*<br>.01* | .002*<br>.002* | .004<br>.02 | .00004*<br>.0005* | .004*<br>.005* | .003<br>.004 | .001*<br>.002* | .007*<br>.009* | .003*<br>.002* | .06<br>.09 | .001*<br>.002 | .004*<br>.005* | .001*<br>.002* | .001*<br>.005 | .003<br>.006 | .4*<br>.02* | .001*<br>.002* | .00004*<br>.00005* |
| at Bonneville, Oregon | 12-12-61<br>4-2-62 | 3-20-62<br>8-20-62 | .03<br>.06 | .32<br>.25 | 2.0<br>1.4 | 10.<br>6. | .01*<br>.01* | .003*<br>.002* | .009<br>.02 | .00005*<br>.0005* | .03<br>.005* | .002<br>.002 | .002*<br>.002* | .01*<br>.01* | .004*<br>.002* | .03<br>.07 | .002*<br>.005 | .005*<br>.005* | .002<br>.002* | .002*<br>.002 | .003<br>.008 | .5*<br>.02* | .002*<br>.002* | .00005*<br>.0003 |
| at McNary Dam, Oregon | 12-12-61<br>3-19-62 | 3-19-62<br>9-24-62 | .08<br>.03 | .27<br>.14 | 2.2<br>1.5 | 10.<br>6. | .01*<br>.01* | .004*<br>.003* | .02<br>.03 | .00006*<br>.0005* | .006*<br>.005* | .01<br>.004 | .002*<br>.003* | .01*<br>.01* | .07<br>.003* | .05<br>.005 | .002*<br>.003* | .006*<br>.005* | .04<br>.003 | .002*<br>.003 | .005<br>.005 | .6*<br>.03* | .002*<br>.003* | .00006*<br>.00005* |
| at Pasco, Washington | 12-18-61<br>4-16-62 | 3-19-62<br>9-17-62 | .03<br>.02 | .27<br>.14 | 1.6<br>1.1 | 3.<br>3. | .01*<br>.01* | .003*<br>.004* | .03<br>.01 | .00004*<br>.0007* | .004*<br>.007* | .009<br>.003 | .002*<br>.004* | .009*<br>.01* | .004*<br>.004* | .003<br>.007 | .002*<br>.004 | .004*<br>.007* | .003<br>.004* | .002*<br>.004* | .004<br>.01 | .4*<br>.04* | .002*<br>.004* | .00005*<br>.00007* |
| at Wenatchee, Washington | 12-26-61<br>3-20-62 | 3-10-62<br>9-4-62 | .04<br>.02* | .18<br>.20 | 1.6<br>1.3 | 3.<br>4. | .01*<br>.01* | .002*<br>.003* | .04<br>.02 | .00004*<br>.0005* | .004*<br>.005* | .0008*<br>.001 | .002*<br>.003* | .008*<br>.01* | .003<br>.003* | .02<br>.003 | .002<br>.003* | .004*<br>.005* | .002<br>.003* | .002*<br>.003* | .003<br>.002 | .4*<br>.03* | .002*<br>.003* | .00004*<br>.00005* |
| at Northport, Washington | 5-17-62 | 9-24-62 | .08 | .08 | .8 | 2. | .01* | .002* | .03 | .0004* | .004* | .0008* | .002* | .008* | .002* | .004 | .004 | .004* | .002* | .002* | .006 | .02 | .002* | .00004* |
| CONNECTICUT RIVER<br>at Enfield Dam, Conn. | 7-16-62 | 9-15-62 | .05 | .14 | 1.8 | 8. | .01* | .002* | .002 | .0004* | .004* | .0007* | .002* | .007* | .002* | .007 | .002* | .004* | .002* | .002* | .007 | .02* | .002* | .00004* |
| below Northfield, Mass. | 12-12-61<br>4-23-62 | 3-20-62<br>8-13-62 | .03<br>.02* | .13<br>.08 | 1.9<br>1.6 | 6.<br>6. | .01*<br>.01* | .002*<br>.001* | .006<br>.003 | .00003*<br>.0003* | .003*<br>.003* | .0007*<br>.0006 | .001*<br>.001* | .007*<br>.006* | .003*<br>.003 | .01<br>.01 | .001*<br>.001* | .003*<br>.003* | .001*<br>.001* | .001*<br>.001* | .006<br>.003 | .3*<br>.03 | .001*<br>.001* | .00003*<br>.002 |
| at Wilder, Vermont | 12-12-61<br>5-18-62 | 3-20-62<br>9-21-62 | .04<br>.01* | .18<br>.14 | 1.9<br>1.1 | 6.<br>22. | .01*<br>.01* | .002*<br>.002* | .006<br>.003 | .00004*<br>.0003* | .007<br>.003 | .003<br>.002 | .001*<br>.002* | .007*<br>.006* | .003*<br>.002* | .02<br>.02 | .001*<br>.002* | .004*<br>.003* | .001*<br>.002* | .001*<br>.002* | .04<br>.006 | .4*<br>.02* | .001*<br>.002* | .00004*<br>.0003 |
| CUMBERLAND RIVER<br>at Clarksville, Tenn. | 12-19-61 | 2-6-62 | .06 | .14 | 1.9 | 4. | .01* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| DELAWARE RIVER<br>at Philadelphia, Pa. | 2-26-62<br>3-12-62 | 3-10-62<br>9-10-62 | .04<br>.05 | -<br>.30 | -<br>2.4 | -<br>8. | .01*<br>.01* | .003*<br>.004* | .008<br>.008 | .00005*<br>.0008* | .005*<br>.008 | .001*<br>.002* | .002*<br>.004* | .01*<br>.02* | .004<br>.004* | .04<br>.004 | .002*<br>.004* | .005*<br>.008* | .002*<br>.004* | .002*<br>.004* | .03<br>.03 | .5*<br>.04* | .002*<br>.004* | .0005<br>.00008* |
| at Trenton, New Jersey | 12-12-61<br>1-2-62 | 3-20-62<br>9-17-62 | .04<br>.02 | .13<br>.30 | 2.5<br>1.8 | 4.<br>3. | .01*<br>.01* | .003*<br>.003* | .03<br>.008 | .00005*<br>.0005* | .005*<br>.005* | .001*<br>.001 | .002*<br>.003* | .01*<br>.01* | .004*<br>.003* | .03<br>.003* | .02<br>.003* | .005*<br>.005* | .002*<br>.003* | .002*<br>.003* | .01<br>.004 | .5*<br>.03* | .002*<br>.003* | .001<br>.00005* |
| at Martins Creek, Pa. | 12-20-61<br>4-11-62 | 3-21-62<br>8-15-62 | .03<br>.02* | .13<br>.01* | 1.9<br>1.1 | 6.<br>3. | .01*<br>.01* | .01<br>.02 | .01<br>.007 | .00003*<br>.0002* | .003*<br>.002* | .0006*<br>.0005* | .001*<br>.001* | .006*<br>.005* | .002*<br>.001* | .02<br>.002 | .04<br>.002 | .003*<br>.002* | .001*<br>.001* | .001*<br>.001* | .05<br>.009 | .3*<br>.04 | .001*<br>.001* | .00003*<br>.00002* |
| ESCAMBIA RIVER<br>at Century, Florida | 12-13-61<br>3-27-62 | 3-21-62<br>9-6-62 | .02<br>.02 | .13<br>.01* | 1.6<br>.8 | 4.<br>3. | .01*<br>.01* | .002*<br>.002* | .01<br>.03 | .00004*<br>.0004* | .004<br>.004 | .005<br>.0008* | .001*<br>.002* | .007*<br>.008* | .003*<br>.002* | .07<br>.02 | .001<br>.004 | .004*<br>.004* | .001*<br>.002* | .001*<br>.002* | .007<br>.008 | .4*<br>.02 | .001*<br>.002* | .00004*<br>.00004* |

* ACTUAL VALUE IS LESS THAN THE AMOUNT SHOWN REPORTED RESULT INDICATES LIMIT OF SENSITIVITY AT WHICH TEST WAS PERFORMED SEE TEXT FOR EXPLANATION.

# TRACE ELEMENTS

## NATIONAL WATER QUALITY NETWORK

## 1960 - 1961

| STATION | DATE | | CONCENTRATION —— MILLIGRAMS PER LITER | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ANALYSIS BY WET OR FLAME METHOD | | | | | ANALYSIS BY SPECTROPHOTOGRAPHIC METHOD | | | | | | | | | | | | | | | | |
| | FROM | TO | B | F | K | Na | Se | Cd | Ba | Be | Pb | Cr | Sn | Sb | Mn | Fe | Ni | Bi | Mo | V | Cu | Zn | Co | Ag |
| GREAT LAKES<br>Lake Erie at Buffalo, New York | 1-3-62<br>3-28-62 | 3-21-62<br>8-15-62 | .04<br>.03 | .13<br>.14 | 2.<br>1.6 | 10.<br>10. | .01*<br>.01* | .006*<br>.004* | .02<br>.01 | .0001*<br>.0008* | .09<br>.008* | .002*<br>.002 | .004*<br>.004* | .02*<br>.02* | .008*<br>.004* | .06<br>.008 | .06<br>.004 | .01*<br>.008* | .004*<br>.004* | .004*<br>.004* | .2<br>.02 | 1.*<br>.2 | .004*<br>.004* | .004<br>.0002 |
| Detroit River at Detroit, Michigan | 12-26-61<br>5-1-62 | 3-19-62<br>8-21-62 | .02<br>.02* | .16<br>.03 | 1.9<br>1.1 | 5.<br>4. | .01*<br>.01* | .004*<br>.003* | .02<br>.005 | .00007*<br>.0005* | .007*<br>.005* | .001*<br>.001* | .003*<br>.003* | .01*<br>.01* | .005*<br>.003* | .03<br>.005 | .003*<br>.003* | .007*<br>.005* | .003*<br>.003* | .003*<br>.003* | .01<br>.002 | .7*<br>.03* | .003*<br>.003* | .00007*<br>.00005* |
| St. Clair River at Port Huron, Michigan | 12-12-61<br>5-7-62 | 3-20-62<br>9-10-62 | .04<br>.05 | .04<br>.08 | 1.6<br>1.0 | 3.<br>2. | .01*<br>.01* | .004*<br>.004* | .009<br>.004 | .00007*<br>.0008* | .007*<br>.008* | .001*<br>.002* | .003*<br>.004* | .01*<br>.01* | .005*<br>.004* | .03<br>.004 | .003*<br>.004* | .007*<br>.008* | .003*<br>.004* | .003*<br>.004* | .007<br>.006 | .7*<br>.04* | .003*<br>.004* | .00007*<br>.00008* |
| Lake Michigan at Gary, Indiana | 12-12-61<br>5-2-62 | 3-20-62<br>9-25-62 | .04<br>.05 | .22<br>.19 | 2.0<br>1.3 | 6.<br>3. | .01*<br>.01* | .006*<br>.005* | .02<br>.005* | .00009*<br>.001* | .009*<br>.01* | .009<br>.002* | .004*<br>.005* | .02*<br>.02* | .008*<br>.005* | .006<br>.005 | .004*<br>.005* | .009*<br>.01* | .004*<br>.005* | .004*<br>.005* | .002<br>.002 | .9*<br>.05* | .004*<br>.005* | .00009*<br>.0001* |
| Lake Michigan at Milwaukee, Wisconsin | 12-12-61<br>5-7-62 | 3-20-62<br>9-10-62 | .10<br>.11 | .11<br>.14 | 1.6<br>2.4 | 5.<br>30. | .01*<br>.01* | .005*<br>.01* | .009<br>.01 | .00009*<br>.002* | .009*<br>.02* | .04<br>.004* | .004*<br>.01* | .02*<br>.04* | .007*<br>.01* | .04<br>.01 | .005<br>.01* | .009*<br>.02* | .004*<br>.01* | .004*<br>.01* | .009<br>.002 | .9*<br>.1* | .004*<br>.01* | .00009*<br>.0002* |
| St. Mary's River at Sault Ste. Marie, Mich. | 12-12-61<br>4-30-62 | 3-20-62<br>9-10-62 | .06<br>.03 | .00<br>.08 | .7<br>..5 | 2.<br>1. | .01*<br>.01* | .002*<br>.002* | .007<br>.004 | .00003*<br>.0004* | .01<br>.004* | .0007*<br>.0008* | .001*<br>.002* | .007*<br>.008* | .005<br>.002* | .03<br>.008 | .001*<br>.002* | .003*<br>.004* | .001*<br>.002* | .001*<br>.002* | .007<br>.002 | .3*<br>.02 | .001*<br>.002* | .00003*<br>.00004* |
| Lake Superior at Duluth, Minnesota | 12-12-61<br>5-7-62 | 3-20-62<br>8-27-62 | .04<br>.02* | .00<br>.03 | .7<br>.6 | 2.<br>2. | .01*<br>.01* | .002*<br>.001* | .01<br>.008 | .00003*<br>.0002* | .02<br>.002* | .0007*<br>.0004 | .001*<br>.001* | .007*<br>.004* | .005<br>.002 | .01<br>.04 | .01<br>.001* | .003*<br>.002* | .001*<br>.001* | .001*<br>.001* | .07<br>.008 | .3*<br>.01* | .001*<br>.001* | .001<br>.0008 |
| GREEN RIVER<br>at Dutch John, Utah | 7-23-62 | 10-8-62 | .12 | .40 | 3.2 | 60. | .01* | .01* | .04 | .002* | .02 | .004* | .01* | .04* | .01* | .01* | .01* | .02* | .01* | .01* | .004 | .1* | .01* | .0002 |
| HUDSON RIVER<br>below Poughkeepsie, N.Y. | 12-13-61<br>3-28-62 | 3-7-62<br>8-21-62 | .08<br>.03 | .06<br>.03 | 1.6<br>1.7 | 10.<br>8. | .01*<br>.01* | .004*<br>.002* | .01<br>.005 | .00007*<br>.0005* | .007*<br>.005* | .006<br>.004 | .003*<br>.002* | .01*<br>.009* | .006*<br>.002* | .01<br>.005 | .004<br>.002* | .007*<br>.005* | .003*<br>.002* | .003*<br>.002* | .007<br>.002 | .7*<br>.02* | .003*<br>.002* | .00007*<br>.0006 |
| ILLINOIS RIVER<br>near Grafton, Illinois | 12-12-61<br>3-26-62 | 3-20-62<br>8-20-62 | .12<br>.12 | .37<br>.30 | 2.8<br>3.7 | 14.<br>15. | .01*<br>.01* | .01*<br>.008* | .04<br>.06 | .0002*<br>.002* | .02*<br>.02* | .004*<br>.003* | .008*<br>.008* | .04*<br>.03* | .02*<br>.008* | .2<br>.008 | .008*<br>.008* | .02*<br>.02* | .008*<br>.008 | .008*<br>.008* | .01<br>.006 | 2.*<br>.08* | .008*<br>.008* | .0002*<br>.0002* |
| at Peoria, Illinois | 12-12-61<br>3-19-62 | 3-18-62<br>9-4-62 | .17<br>.15 | .68<br>.70 | 3.<br>3.8 | 22.<br>16. | .01*<br>.01* | .01*<br>.01* | .03<br>.02 | .0002*<br>.002* | .02*<br>.02* | .004*<br>.004* | .008*<br>.01* | .04*<br>.04* | .02*<br>.01* | .08<br>.01 | .008<br>.01* | .02*<br>.02* | .008<br>.01 | .008*<br>.01* | .01<br>.01 | 2.*<br>.1* | .008*<br>.01* | .0004*<br>.0002* |
| KANAWHA RIVER<br>at Winfield Dam, W. Va. | 12-21-61<br>3-28-62 | 3-16-62<br>10-13-62 | .06<br>.05 | .06<br>.25 | 1.4<br>2.2 | 7.<br>15. | .01*<br>.01* | .003*<br>.006* | .07<br>.1 | .00005*<br>.001* | .005*<br>.01 | .0009*<br>.002* | .002*<br>.006* | .009*<br>.02* | .004*<br>.006* | .05<br>.006 | .006<br>.006* | .005*<br>.01* | .002*<br>.006* | .002*<br>.006* | .005<br>.007 | .5*<br>.06* | .002*<br>.006* | .00005*<br>.0001* |
| KIAMATH RIVER<br>near Keno, Oregon | 12-12-61<br>3-20-62 | 3-20-62<br>9-18-62 | .12<br>.05 | .21<br>.25 | 3.4<br>3.3 | 20.<br>14. | .01*<br>.01* | .006*<br>.003* | .004<br>.01 | .0001*<br>.0006* | .01*<br>.006* | .002*<br>.001 | .004*<br>.003* | .02*<br>.01* | .008*<br>.003* | .04<br>.003 | .01<br>.02 | .01*<br>.006* | .008<br>.003 | .01<br>.02 | .04<br>.05 | 1.*<br>.03* | .004*<br>.003* | .0001*<br>.00006* |
| LITTLE MIAMI RIVER<br>at Cincinnati, Ohio | 4-28-62 | 9-26-62 | .08 | .25 | 3.2 | 10. | .01* | .008* | .03 | .002* | .02* | .003* | .008* | .03* | .008* | .02 | .008* | .02* | .008* | .008* | .03 | .08* | .008* | .0007 |
| MISSISSIPPI RIVER<br>at New Orleans, La. | 12-12-61<br>5-24-62 | 3-20-62<br>9-6-62 | .06<br>.05 | .16<br>.25 | 2.8<br>3.1 | 18.<br>14. | .01*<br>.01* | .005*<br>.007* | .07<br>.04 | .00009*<br>.001* | .009*<br>.01* | .002*<br>.003* | .003<br>.007* | .02*<br>.03* | .009<br>.007* | .07<br>.01 | .003<br>.007* | .009*<br>.01* | .003<br>.007* | .003*<br>.007* | .007<br>.003 | .9*<br>.07* | .003*<br>.007* | .00009*<br>.0001* |
| at Vicksburg, Miss. | 12-18-61<br>4-9-62 | 3-19-62<br>9-10-62 | .08<br>.03 | .06<br>.25 | 2.8<br>3.9 | 9.<br>17. | .01*<br>.01* | .004*<br>.006* | .01<br>.04 | .00006*<br>.001* | .01<br>.01* | .001*<br>.003* | .003*<br>.006* | .01*<br>.03* | .005*<br>.006* | .04<br>.01 | .007<br>.006* | .006*<br>.01* | .003*<br>.006* | .003*<br>.006* | .1<br>.01 | .6*<br>.06* | .003*<br>.006* | .001<br>.0001* |
| at Delta, Louisiana | 12-12-61<br>3-27-62 | 3-12-62<br>9-19-62 | .09<br>.10 | .11<br>.35 | 2.2<br>3.7 | 11.<br>21. | .01*<br>.01* | .005*<br>.006* | .03<br>.06 | .00008*<br>.001* | .008*<br>.01* | .002*<br>.003* | .003*<br>.006* | .02*<br>.03* | .007*<br>.006* | .1<br>.08 | .005<br>.006* | .008*<br>.01* | .003*<br>.006 | .003*<br>.006* | .008<br>.006 | .8*<br>.06* | .003*<br>.006* | .00008*<br>.0001* |
| at West Memphis, Ark. | 12-11-61<br>5-5-62 | 2-26-62<br>8-27-62 | .05<br>.06 | .21<br>.30 | 2.5<br>3.9 | 10.<br>15. | .01*<br>.01* | .005*<br>.006* | .01<br>.05 | .00009*<br>.001* | .009*<br>.01* | .002*<br>.002* | .003*<br>.006* | .02*<br>.02* | .007*<br>.006* | .05<br>.01 | .003*<br>.006* | .009*<br>.01* | .003*<br>.006 | .003*<br>.006* | .007<br>.007 | .9*<br>.06* | .003*<br>.006* | .00009*<br>.002 |

* ACTUAL VALUE IS LESS THAN THE AMOUNT SHOWN REPORTED RESULT INDICATES LIMIT OF SENSITIVITY AT WHICH TEST WAS PERFORMED SEE TEXT FOR EXPLANATION.

# TRACE ELEMENTS

## NATIONAL WATER QUALITY NETWORK

## 1960 - 1961

| STATION | DATE | | CONCENTRATION — MILLIGRAMS PER LITER | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ANALYSIS BY WET OR FLAME METHOD | | | | | ANALYSIS BY SPECTROPHOTOGRAPHIC METHOD | | | | | | | | | | | | | | | | |
| | FROM | TO | B | F | K | Na | Se | Cd | Ba | Be | Pb | Cr | Sn | Sb | Mn | Fe | Ni | Bi | Mo | V | Cu | Zn | Co | Ag |
| MISSISSIPPI RIVER (Contd.)<br>at Cape Girardeau, Mo. | 12-18-61<br>3-26-62 | 3-19-62<br>8-20-62 | .05<br>.04 | .14<br>.35 | 3.0<br>5.0 | 12.<br>17. | .01*<br>.01* | .007*<br>.007* | .05<br>.05 | .0001*<br>.001* | .01*<br>.01* | .007<br>.003* | .005*<br>.007* | .02*<br>.03* | .1<br>.007* | .7<br>.01 | .01<br>.007* | .01*<br>.01* | .007<br>.007 | .005*<br>.007* | .07<br>.003 | 1.*<br>.07* | .005*<br>.007* | .001<br>.0001 |
| at East St. Louis, Ill. | 12-12-61<br>3-26-62 | 3-20-62<br>8-27-62 | .08<br>.03 | .32<br>.30 | 2.8<br>3.6 | 11.<br>11. | .01*<br>.01* | .008*<br>.007* | .06<br>.05 | .0001*<br>.001* | .01*<br>.01* | .02<br>.003* | .006*<br>.007* | .03*<br>.03* | .01*<br>.007* | .006<br>.007 | .006*<br>.007* | .01*<br>.01* | .006<br>.007 | .006*<br>.007* | .008<br>.003 | 1.*<br>.07* | .006*<br>.007* | .0001*<br>.0001* |
| at Burlington, Iowa | 12-12-61<br>5-7-62 | 3-20-62<br>8-20-62 | .09<br>.09 | .11<br>.25 | 2.2<br>2.9 | 9.<br>6. | .01*<br>.01* | .007*<br>.005* | .07<br>.01 | .0001*<br>.001* | .01*<br>.01* | .002*<br>.002* | .004*<br>.005* | .02*<br>.02* | .009*<br>.005* | .02<br>.005 | .004*<br>.005* | .01*<br>.01* | .004*<br>.005* | .004*<br>.005* | .2<br>.02 | 1.*<br>.05* | .004*<br>.005* | .0001*<br>.0001* |
| at Dubuque, Iowa | 1-2-62<br>5-7-62 | 3-26-62<br>6-25-62 | .08<br>.08 | .11<br>.25 | 2.2<br>2.9 | 7.<br>6. | .01*<br>.01* | .006*<br>.005* | .04<br>.02 | .0001*<br>.001* | .01*<br>.01* | .002*<br>.002* | .004*<br>.005* | .02*<br>.02* | .01<br>.005* | .1<br>.1 | .004<br>.005* | .01*<br>.01* | .004*<br>.005* | .004*<br>.005 | .02<br>.016 | 1.*<br>.05* | .004*<br>.005* | .0008<br>.0001 |
| Lock and Dam #3 below<br>St. Paul, Minn. | 12-19-61<br>5-1-62 | 3-13-62<br>7-24-62 | .13<br>.06 | .32<br>.30 | 3.0<br>3.9 | 14.<br>9. | .01*<br>.01* | .008*<br>.007* | .03<br>.01 | .0001*<br>.001* | .01*<br>.01* | .008<br>.003* | .005*<br>.007* | .03*<br>.03* | .08<br>.007* | .05<br>.007 | .005*<br>.007* | .01*<br>.01* | .008<br>.007* | .005*<br>.007* | .01<br>.006 | 1.*<br>.07* | .005*<br>.007* | .0001*<br>.003 |
| MISSOURI RIVER<br>at St. Louis, Missouri | 12-12-61<br>3-26-62 | 3-20-62<br>8-20-62 | .11<br>.04 | .53<br>.40 | 4.1<br>7.1 | 22.<br>28. | .01*<br>.01* | .009*<br>.008* | .09<br>.08 | .0002*<br>.002* | .02*<br>.02* | .003*<br>.003 | .006*<br>.008* | .03*<br>.03* | .01*<br>.008* | .06<br>.08 | .006*<br>.008* | .02*<br>.02* | .006*<br>.008 | .006*<br>.008 | .009<br>.01 | 2.*<br>.08* | .006*<br>.008* | .0003<br>.002 |
| at Missouri City, Mo. | 12-12-61<br>4-3-62 | 3-20-62<br>9-25-62 | .12<br>.10 | .53<br>.40 | 5.6<br>8.3 | 27.<br>44. | .01*<br>.01* | .01*<br>.01* | .07<br>.1 | .0002*<br>.002* | .02*<br>.02* | .003*<br>.004* | .007*<br>.01* | .03*<br>.04* | .01*<br>.01* | .007*<br>.02 | .007*<br>.01* | .02*<br>.02* | .007*<br>.01* | .007*<br>.01* | .03<br>.004 | 2.*<br>.1* | .007*<br>.01* | .0002*<br>.0002* |
| at Kansas City, Kansas | 12-12-61<br>3-26-62 | 3-20-62<br>8-20-62 | .14<br>.08 | .50<br>.46 | 5.5<br>8.4 | 24.<br>38. | .01*<br>.01* | .01*<br>.01* | .1<br>.08 | .0002*<br>.002* | .02*<br>.02* | .004*<br>.004* | .008*<br>.01* | .04*<br>.04* | .01*<br>.01* | .2<br>.01 | .008<br>.01* | .02*<br>.02* | .008*<br>.01 | .008*<br>.01 | .02<br>.01 | 2.*<br>.1* | .008*<br>.01* | .0002*<br>.0004 |
| at St. Joseph, Missouri | 1-8-62<br>5-7-62 | 3-5-62<br>8-20-62 | .14<br>.08 | .47<br>.46 | 5.6<br>8.4 | 38.<br>40. | .01*<br>.01* | .01*<br>.01* | .08<br>.1 | .0002*<br>.002* | .02<br>.02* | .004*<br>.004 | .008*<br>.01* | .04*<br>.04* | .02*<br>.01* | .1<br>.06 | .02<br>.01* | .02*<br>.02* | .008<br>.01* | .008*<br>.01 | .3<br>.01 | 2.*<br>.1* | .008*<br>.01* | .02<br>.002 |
| at Omaha, Nebraska | 12-28-61<br>3-26-62 | 3-19-62<br>8-13-62 | .20<br>.09 | .63<br>.40 | 6.0<br>8.4 | 50.<br>36. | .01*<br>.01* | .01*<br>.01* | .02<br>.04 | .0002*<br>.002* | .02*<br>.02* | .005*<br>.004* | .009*<br>.01* | .05*<br>.04* | .02*<br>.01* | .2<br>.04 | .009<br>.01* | .02*<br>.02* | .009<br>.01* | .009*<br>.01* | .02<br>.002 | 2.*<br>.1* | .009*<br>.01* | .0002*<br>.0002* |
| at Yankton, South Dakota | 12-12-61<br>4-2-62 | 3-20-62<br>9-4-62 | .20<br>.14 | .57<br>.60 | 5.6<br>8.0 | 52.<br>58. | .01*<br>.01* | .01*<br>.01* | .05<br>.02 | .0002*<br>.002* | .02*<br>.02* | .005*<br>.004* | .009*<br>.01* | .05*<br>.04* | .02<br>.01* | .08<br>.01* | .009*<br>.01* | .02*<br>.02* | .009<br>.01* | .009*<br>.01* | .3<br>.009 | 2.*<br>.1* | .009*<br>.01* | .0002<br>.0002* |
| at Bismarck, North Dakota | 1-2-62<br>3-21-62 | 3-19-62<br>9-18-62 | .17<br>.15 | .70<br>.62 | 4.3<br>5.0 | 53.<br>60. | .01*<br>.01* | .01*<br>.012* | .04<br>.02 | .0002*<br>.002* | .02*<br>.02* | .004*<br>.005* | .009*<br>.012* | .04*<br>.05* | .02*<br>.012* | .1<br>.01 | .009*<br>.01* | .02*<br>.02* | .009<br>.01* | .009*<br>.01* | .02<br>.02 | 2.*<br>.1* | .009*<br>.01* | .0002*<br>.0005 |
| at Williston, N. Dakota | 2-2-62<br>4-2-62 | 3-12-62<br>8-20-62 | .14<br>.12 | .83<br>.46 | 4.5<br>4.7 | 44.<br>48. | .01*<br>.01* | .01*<br>.009* | .008*<br>.018 | .0002*<br>.002* | .02*<br>.018* | .004*<br>.004 | .008*<br>.009* | .04*<br>.04* | .02*<br>.009* | .01<br>.009 | .008*<br>.009* | .02*<br>.018* | .008*<br>.009* | .008*<br>.009* | .01<br>.007 | 2.*<br>.09* | .008*<br>.009* | .008<br>.0002* |
| MONOGAHELA RIVER<br>at Pittsburgh, Pa. | 1-3-62<br>5-1-62 | 3-19-62<br>9-17-62 | .12<br>.06 | .32<br>.35 | 2.2<br>3.6 | 11.<br>29. | .01*<br>.01* | .005*<br>.009* | .01<br>.02 | .00009*<br>.002* | .009*<br>.03 | .002*<br>.003* | .004*<br>.009* | .02*<br>.03* | .1<br>.2 | .004<br>.009 | .02<br>.02 | .009*<br>.02* | .004*<br>.009* | .004*<br>.009* | .005<br>.07 | .9*<br>.03 | .004*<br>.009* | .00009*<br>.0003 |
| NORTH PLATTE RIVER<br>above Henry, Nebraska | 9-11-61<br>4-30-62 | 2-5-62<br>9-4-62 | .12<br>.10 | .36<br>.51 | 6.8<br>8.0 | 79.<br>80. | .01*<br>.01* | .01*<br>.01* | .09<br>.05 | .0002*<br>.003* | .02*<br>.03* | .005*<br>.005* | .009*<br>.01* | .05*<br>.05* | .02<br>.01* | .1<br>.01* | .009*<br>.01* | .02*<br>.03* | .01<br>.01 | .009*<br>.01 | .02<br>.005 | 2.*<br>.1* | .009*<br>.01* | .0002*<br>.0003* |

* ACTUAL VALUE IS LESS THAN THE AMOUNT SHOWN REPORTED RESULT INDICATES LIMIT OF SENSITIVITY AT WHICH TEST WAS PERFORMED SEE TEXT FOR EXPLANATION.

# TRACE ELEMENTS

## NATIONAL WATER QUALITY NETWORK

## 1960 - 1961

| STATION | DATE | | CONCENTRATION —— MILLIGRAMS PER LITER | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | FROM | TO | ANALYSIS BY WET OR FLAME METHOD | | | | | ANALYSIS BY SPECTROPHOTOGRAPHIC METHOD | | | | | | | | | | | | | | | | |
| | | | B | F | K | Na | Se | Cd | Ba | Be | Pb | Cr | Sn | Sb | Mn | Fe | Ni | Bi | Mo | V | Cu | Zn | Co | Ag |
| OHIO RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| at Cairo, Illinois | 12-12-61<br>4-23-62 | 3-20-62<br>9-16-62 | .08<br>.05 | .14<br>.25 | 2.2<br>2.2 | 8.<br>9. | .01*<br>.01* | .005*<br>.006* | .03<br>.02 | .00008*<br>.001* | .008*<br>.01* | .002*<br>.002* | .003*<br>.006* | .02*<br>.02* | .006*<br>.006* | .1<br>.01 | .003<br>.006* | .008*<br>.01* | .003*<br>.006* | .003*<br>.006* | .08<br>.007 | .8*<br>.06* | .003*<br>.006* | .0006<br>.0001* |
| at Evansville, Indiana | 1-2-62<br>3-26-62 | 3-19-62<br>9-24-62 | .07<br>.05 | .17<br>.30 | 2.8<br>2.7 | 10.<br>13. | .01*<br>.01* | .005*<br>.007* | .07<br>.03 | .00008*<br>.001* | .01<br>.01* | .008<br>.003* | .003*<br>.007* | .02*<br>.03* | .007*<br>.007* | .005<br>.01 | .03<br>.007* | .008*<br>.01* | .005<br>.007* | .003*<br>.007* | .01<br>.003 | .8*<br>.07* | .003*<br>.007* | .00008*<br>.0001* |
| at Louisville, Kentucky | 12-12-61<br>4-3-62 | 3-20-62<br>8-28-62 | .10<br>.06 | .24<br>.30 | 2.8<br>3.3 | 7.<br>20. | .01*<br>.01* | .004*<br>.006* | .07<br>.04 | .00007*<br>.001* | .007*<br>.01* | .001*<br>.002* | .003*<br>.006* | .01*<br>.02* | .006<br>.006* | .01<br>.04 | .003*<br>.006* | .007*<br>.01* | .003*<br>.006 | .003*<br>.006* | .006<br>.005 | .7*<br>.06* | .003*<br>.006* | .00007*<br>.0001* |
| at Cincinnati, Ohio | 1-3-62<br>3-28-62 | 3-21-62<br>9-26-62 | .08<br>.03 | .27<br>.30 | 2.5<br>3.0 | 9.<br>24. | .01*<br>.01* | .005*<br>.008* | .05<br>.03 | .00009*<br>.002* | .009*<br>.02* | .002*<br>.003* | .003*<br>.008* | .02*<br>.03* | .007*<br>.008* | .05<br>.02 | .009<br>.008* | .009*<br>.02* | .005<br>.008* | .003*<br>.008* | .1<br>.06 | .9*<br>.08* | .003*<br>.008* | .001<br>.0002* |
| at Huntington, W. Va. | 12-26-61<br>4-9-62 | 3-20-62<br>9-24-62 | .07<br>.05 | .27<br>.40 | 3.1<br>3.2 | 23.<br>29. | .01*<br>.01* | .007*<br>.008* | .04<br>.06 | .0001*<br>.002* | .01*<br>.02 | .007<br>.003* | .004*<br>.008* | .02*<br>.03* | .01<br>.008* | .02<br>.008 | .004<br>.008* | .01*<br>.02* | .004*<br>.008* | .004*<br>.008* | .1<br>.006 | 1.*<br>.08* | .004*<br>.008* | .001<br>.0002 |
| below Addison, Ohio | 6-12-62 | 10-8-62 | .14 | .40 | 5.5 | 57. | .01* | .01* | .04 | .002* | .02* | .004* | .01* | .04* | .01* | .01* | .01* | .02* | .01* | .01* | .004 | .1* | .01* | .0004 |
| OUACHITA RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| at Bastrop, Louisiana | 12-11-61<br>4-23-62 | 3-26-62<br>9-17-62 | .04<br>.10 | .00<br>.20 | 2.0<br>3.2 | 16.<br>71. | .01*<br>.01* | .002*<br>.007* | .02<br>.07 | .00004*<br>.001* | .006*<br>.01 | .0008*<br>.003* | .002*<br>.007* | .008*<br>.03* | .004<br>.007* | 1.0<br>.007 | .002*<br>.007 | .004*<br>.01* | .002*<br>.007* | .002*<br>.007* | .06<br>.008 | .4*<br>.07* | .002*<br>.007* | .00004*<br>.0001* |
| PEND OREILLE RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| at Albeni Falls Dam, Idaho | 5-13-62 | 9-14-62 | .10 | .08 | .8 | 3. | .01* | .002* | .02 | .0004* | .004* | .0008* | .002* | .008* | .002* | .002 | .002* | .004* | .002* | .002* | .004 | .02* | .002* | .0002 |
| PLATTE RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| above Plattsmouth, Neb. | 1-2-62<br>5-22-62 | 3-6-62<br>9-18-62 | .10<br>.05 | .34<br>.51 | 8.6<br>9.7 | 68.<br>43. | .01*<br>.01* | .01*<br>.009* | .2<br>.1 | .0002*<br>.002* | .02*<br>.02 | .005*<br>.004* | .009*<br>.009* | .05*<br>.04* | .02*<br>.009* | .02<br>.04 | .009*<br>.009* | .02*<br>.02* | .009*<br>.009* | .009*<br>.02 | .004<br>.03 | 2.*<br>.09* | .009*<br>.009* | .0002*<br>.0002* |
| POTOMAC RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| at Great Falls, Maryland | 12-25-61<br>4-2-62 | 3-26-62<br>9-17-62 | .02<br>.06 | .03<br>.19 | 2.0<br>2.7 | 5.<br>11. | .01*<br>.01* | .003*<br>.005* | .006<br>.01 | .00005*<br>.001* | .005*<br>.01* | .0009*<br>.002* | .002*<br>.005* | .009*<br>.02* | .004*<br>.005* | .05<br>.005 | .002*<br>.005* | .005*<br>.01* | .002*<br>.005* | .002*<br>.005* | .003<br>.01 | .5*<br>.05 | .002*<br>.005* | .00005*<br>.0002 |
| at Williamsport, Maryland | 12-18-61<br>4-30-62 | 3-19-62<br>9-17-62 | .02<br>.02 | .00<br>.14 | 1.6<br>2.0 | 4.<br>8. | .01*<br>.01* | .002*<br>.005* | .008<br>.01 | .00004*<br>.001* | .004*<br>.01* | .003<br>.002* | .002*<br>.005* | .008*<br>.02* | .003*<br>.005* | .04<br>.01 | .002<br>.005* | .004*<br>.01* | .002*<br>.005* | .002*<br>.005* | .004<br>.004 | .4*<br>.05* | .002*<br>.005* | .0004*<br>.0001* |
| RAINY RIVER | | | | | | | | | | | | | | | | | | | | | | | | |
| at International Falls, Minnesota | 1-2-62<br>4-23-62 | 3-26-62<br>9-4-62 | .03<br>.01* | .03<br>.14 | 1.6<br>1.0 | 7.<br>1. | .01*<br>.01* | .003*<br>.001* | .02<br>.004 | .00004*<br>.0003* | .004*<br>.003* | .0009*<br>.0006* | .002*<br>.001* | .009*<br>.006* | .006<br>.001* | .04<br>.003 | .003<br>.006 | .004*<br>.003* | .002*<br>.001* | .002*<br>.001* | .009<br>.01 | .4*<br>.06 | .002*<br>.001* | .00004*<br>.00003 |
| at Baudette, Minnesota | 1-2-62<br>4-23-62 | 3-19-62<br>8-27-62 | .03<br>.09 | .06<br>.25 | 1.4<br>2.7 | 3.<br>16. | .01*<br>.01* | .002*<br>.009* | .008<br>.02 | .00004*<br>.002* | .004*<br>.02* | .008*<br>.004* | .002*<br>.009* | .008*<br>.04* | .03<br>.02 | .008<br>.02 | .002*<br>.009* | .004*<br>.02* | .002*<br>.009* | .002*<br>.009* | .03<br>.02 | 7.3<br>.5 | .002*<br>.009* | .00004*<br>.0002* |
| RED RIVER (South) | | | | | | | | | | | | | | | | | | | | | | | | |
| at Alexandria, La. | 12-11-61<br>4-23-62 | 3-19-62<br>9-10-62 | .04<br>.08 | .05<br>.25 | 2.2<br>4.6 | 28.<br>75. | .01*<br>.01* | .005*<br>.01* | .04<br>.06 | .00009*<br>.002* | .009*<br>.02* | .002*<br>.004* | .004*<br>.01* | .02*<br>.04* | .007*<br>.01* | .2<br>.01 | .004*<br>.01* | .009*<br>.02* | .004*<br>.01* | .004*<br>.01* | .002<br>.008 | .9*<br>.1* | .004*<br>.01* | .00009*<br>.001 |
| at Bossier City, La. | 6-18-62 | 9-11-62 | .18 | .35 | 6.3 | 212. | .01* | .02* | .16 | .004* | .04* | .008* | .02* | .08* | .02* | .02* | .02* | .04* | .02* | .02* | .02 | .2* | .02* | .0004* |
| at Index, Arkansas | 12-12-61<br>4-30-62 | 3-20-62<br>9-11-62 | .10<br>.12 | .14<br>.46 | 3.4<br>5.6 | 110.<br>138. | .01*<br>.01* | .02*<br>.02* | .1<br>.1 | .0003*<br>.003* | .03*<br>.03* | .006*<br>.007* | .01*<br>.02* | .06*<br>.07* | .02*<br>.02* | .2<br>.02 | .01*<br>.02* | .03*<br>.03* | .01*<br>.02* | .01*<br>.02* | .003<br>.007 | 3.*<br>.2 | .01*<br>.02* | .0003*<br>.0003* |
| at Denison, Texas | 12-12-61<br>4-30-62 | 3-20-62<br>7-30-62 | .14<br>.21 | .33<br>.30 | 5.0<br>7.7 | 237.<br>196. | .01*<br>.01* | .04*<br>.03* | .1<br>.06 | .0006*<br>.006* | .06*<br>.06* | .04<br>.01* | .02*<br>.03* | .1*<br>.1* | .05*<br>.03* | .02*<br>.03* | .02*<br>.03* | .06*<br>.06* | .02*<br>.03* | .02*<br>.03* | .06<br>.03 | 6.*<br>.3* | .02*<br>.03* | .006<br>.002 |

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# TRACE ELEMENTS
## NATIONAL WATER QUALITY NETWORK
## 1960 - 1961

| STATION | DATE | | CONCENTRATION —— MILLIGRAMS PER LITER | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | FROM | TO | ANALYSIS BY WET OR FLAME METHOD | | | | | ANALYSIS BY SPECTROPHOTOGRAPHIC METHOD | | | | | | | | | | | | | | | |
| | | | B | F | K | Na | Se | Cd | Ba | Be | Pb | Cr | Sn | Sb | Mn | Fe | Ni | Bi | Mo | V | Cu | Zn | Co | Ag |
| RIO GRANDE<br>at Brownsville, Texas | 12-12-61<br>4-26-62 | 3-20-62<br>10-1-62 | .17<br>.40 | .43<br>.64 | 3.9<br>7.8 | 85.<br>80. | .01*<br>.01* | .01*<br>.02* | .01*<br>.06 | .0002*<br>.004* | .02*<br>.04* | .005*<br>.008* | .01*<br>.02* | .05*<br>.08* | .02*<br>.02* | .02<br>.02* | .01*<br>.02* | .02*<br>.04* | .01*<br>.02* | .01*<br>.02* | .01<br>.004 | 2.*<br>.2* | .01*<br>.02* | .0003<br>.0004* |
| at Laredo, Texas | 12-12-61<br>4-24-62 | 3-20-62<br>8-28-62 | .18<br>.18 | .76<br>.78 | 4.1<br>6.3 | 108.<br>85. | .01*<br>.01* | .02*<br>.01* | .07<br>.04 | .0003*<br>.003* | .03*<br>.03* | .007*<br>.005* | .01*<br>.01* | .07*<br>.05* | .03*<br>.01* | .07<br>.01 | .01*<br>.01* | .03*<br>.03* | .01<br>.01 | .01*<br>.01 | .03<br>.005 | 3.*<br>.1* | .01*<br>.01* | .003<br>.0003* |
| at El Paso, Texas | 12-12-61<br>4-30-62 | 3-20-62<br>8-27-62 | .29<br>.20 | .62<br>.56 | 9.3<br>11.0 | 270.<br>145. | .01*<br>.01* | .04*<br>.02* | .03<br>.04 | .0007*<br>.004* | .07*<br>.04* | .01*<br>.007* | .03*<br>.02* | .1*<br>.07* | .05*<br>.02* | .03*<br>.02* | .03*<br>.02* | .07*<br>.04* | .03<br>.02 | .03*<br>.02* | .004*<br>.02 | 7.*<br>.2* | .03*<br>.02* | .0007*<br>.002 |
| below Alamosa, Colorado | 1-2-62<br>3-26-62 | 3-19-62<br>9-4-62 | .06<br>.90 | .35<br>.72 | 3.8<br>6.4 | 16.<br>43. | .01*<br>.01* | .006*<br>.008* | .02<br>.03 | .0001*<br>.002* | .01<br>.02* | .02<br>.003* | .004*<br>.008* | .02*<br>.03* | 1.<br>.008* | 2.<br>.02 | .004*<br>.008* | .01*<br>.02* | .006<br>.008 | .004*<br>.008 | .008<br>.006 | 1.*<br>.08* | .004*<br>.008* | .0001*<br>.0002* |
| ROANOKE RIVER<br>at John Kerr Reservoir and Dam, Virginia | 12-11-61<br>3-26-62 | 3-9-62<br>9-4-62 | .18<br>.03 | .49<br>.14 | 3.9<br>1.8 | 79.<br>3. | .01*<br>.01* | .01*<br>.002* | .01<br>.01 | .0002*<br>.0004* | .02*<br>.004* | .005*<br>.001 | .009*<br>.002* | .05*<br>.01* | .02*<br>.002* | .09<br>.03 | .009*<br>.002* | .02*<br>.004* | .009*<br>.002* | .009*<br>.002* | .003<br>.004 | 2.*<br>.02* | .009*<br>.002* | .0002*<br>.00004* |
| SABINE RIVER<br>near Ruliff, Texas | 12-12-61<br>3-26-62 | 3-20-62<br>9-24-62 | .04<br>.04 | .03<br>.08 | 2.2<br>2.9 | 20.<br>29. | .01*<br>.01* | .004*<br>.004* | .02<br>.03 | .00006*<br>.0007* | .006*<br>.007* | .001*<br>.001* | .002*<br>.004* | .01*<br>.01* | .02<br>.004* | .4<br>.01 | .002<br>.007 | .006*<br>.007* | .002*<br>.004* | .002*<br>.004* | .2<br>.007 | .6*<br>.07 | .002*<br>.004* | .00006*<br>.00007* |
| SACRAMENTO RIVER<br>at Greens Landing above Courtland, Calif. | 5-31-62 | 9-13-62 | .06 | .20 | 0.9 | 8. | .01* | .003* | .02 | .0006* | .006* | .002 | .003* | .01* | .003* | .04 | .003* | .006* | .003 | .003 | .01 | .03* | .003* | .00006 |
| ST. LAWRENCE RIVER<br>at Massena, New York | 12-26-61<br>4-30-62 | 3-26-62<br>9-10-62 | .03<br>.08 | .00<br>.25 | 1.9<br>1.8 | 10.<br>9. | .01*<br>.01* | .006*<br>.006* | .04<br>.01 | .00009*<br>.001* | .009*<br>.01* | .002*<br>.002* | .004*<br>.006* | .02*<br>.02* | .008*<br>.006* | .004*<br>.01 | .004*<br>.006* | .009*<br>.01* | .004*<br>.006* | .004*<br>.006* | .004<br>.004 | .9*<br>.06* | .004*<br>.006* | .00009*<br>.0001* |
| SAN JOAQUIN RIVER<br>near Vernalis, California | 7-18-62 | 9-19-62 | .36 | .20 | 6.4 | 119. | .01* | .01* | .06 | .003* | .03* | .006* | .01* | .06* | .01* | .01 | .01* | .03* | .01* | .01* | .006 | .1* | .01* | .0003 |
| SAN JUAN RIVER<br>at Shiprock, New Mexico | 12-19-61<br>6-4-62 | 3-12-62<br>9-17-62 | .04<br>.12 | .34<br>.51 | 3.8<br>5.4 | 69.<br>99. | .01*<br>.01* | .02*<br>.02* | .03<br>.04 | .0003*<br>.004* | .03*<br>.04* | .006*<br>.009* | .01*<br>.02* | .06*<br>.09* | .02*<br>.02* | .2<br>.02* | .01*<br>.02* | .03*<br>.04* | .01*<br>.02* | .01*<br>.02* | .01<br>.03 | 3.*<br>.2* | .01*<br>.02* | .0003*<br>.0004 |
| SAVANNAH RIVER<br>at Port Wentworth, Ga. | 12-20-61<br>4-30-62 | 3-19-62<br>8-13-62 | .02<br>.03 | .03<br>.03 | 1.6<br>1.6 | 10.<br>14. | .01*<br>.01* | .002*<br>.001* | .005<br>.002 | .00003*<br>.0002* | .003<br>.002* | .0005*<br>.0005* | .001*<br>.001* | .005*<br>.005* | .002*<br>.001* | .05<br>.002 | .03<br>.001* | .003*<br>.002* | .001*<br>.001* | .001*<br>.001* | .03<br>.002 | .3*<br>.01* | .001*<br>.001* | .0001<br>.00002 |
| at North Augusta, S. C. | 12-12-61<br>4-2-62 | 3-20-62<br>9-10-62 | .03<br>.01* | .16<br>.08 | 2.0<br>1.4 | 4.<br>3. | .01*<br>.01* | .001*<br>.002* | .003<br>.01 | .00002*<br>.0004* | .002*<br>.004 | .003<br>.0008 | .001<br>.002* | .004*<br>.008* | .002*<br>.002* | .03<br>.02 | .0009*<br>.002* | .002*<br>.004* | .0009*<br>.002* | .0009*<br>.002* | .02<br>.02 | .2*<br>.08 | .0009*<br>.002* | .0002<br>.0006 |
| SCHUYLKILL RIVER<br>at Philadelphia, Pa. | 12-18-61<br>4-2-62 | 3-26-62<br>8-24-62 | .04<br>.12 | .14<br>.40 | 3.0<br>4.1 | 10.<br>20. | .01*<br>.01* | .006*<br>.006* | .02<br>.03 | .0001*<br>.001* | .01*<br>.01* | .002*<br>.003* | .004*<br>.006* | .02*<br>.03* | .008*<br>.006* | .02<br>.01 | .01<br>.006* | .01*<br>.01* | .004*<br>.006* | .004*<br>.006* | .02<br>.008 | 1.*<br>.06* | .004*<br>.006* | .0001*<br>.0001* |
| SHENANDOAH RIVER<br>at Berryville, Va. | 12-12-61<br>5-8-62 | 3-20-62<br>9-19-62 | .00<br>.04 | .08<br>.08 | 2.0<br>3.2 | 9.<br>21. | .01*<br>.01* | .005*<br>.006* | .05<br>.04 | .00008*<br>.001* | .008*<br>.01* | .002*<br>.002* | .003*<br>.006* | .02*<br>.02* | .007*<br>.006* | .05<br>.02 | .003*<br>.006* | .008*<br>.01* | .003*<br>.006* | .003*<br>.006* | .2<br>.04 | .8*<br>.1 | .003*<br>.006* | .0007<br>.0001* |
| SNAKE RIVER<br>at Ice Harbor Dam, Wash. | 5-25-62 | 10-1-62 | .10 | .35 | 3.2 | 18. | .01* | .003* | .01 | .0006* | .006* | .001* | .003* | .01* | .003* | .006 | .003* | .006* | .003 | .006 | .01 | .03* | .003* | .00006* |
| at Wawawai, Washington | 1-8-62<br>4-9-62 | 4-2-62<br>8-27-62 | .04<br>.03 | .40<br>.20 | 3.1<br>1.9 | 22.<br>9. | .01*<br>.01* | .006*<br>.002* | .04<br>.006 | .0001*<br>.0004* | .01*<br>.004 | .002*<br>.0008* | .004*<br>.002* | .02*<br>.008* | .008*<br>.002* | .06<br>.004 | .004*<br>.002* | .01*<br>.004* | .006<br>.002 | .004<br>.004 | .008<br>.003 | 1.*<br>.02* | .004*<br>.002* | .0001<br>.00004* |
| at Payette, Idaho | 12-27-61<br>4-25-62 | 3-21-62<br>9-12-62 | .10<br>.03 | .74<br>.83 | 5.0<br>5.5 | 38.<br>25. | .01*<br>.01* | .01*<br>.004* | .03<br>.04 | .0002*<br>.001* | .07<br>.07 | .003*<br>.002* | .007*<br>.004* | .03*<br>.02* | .01*<br>.004* | .2<br>.004* | .007*<br>.004* | .02*<br>.01* | .01<br>.01 | .007*<br>.01 | .007<br>.007 | 2.*<br>.04* | .007*<br>.004* | .001<br>.0001 |

* ACTUAL VALUE IS LESS THAN THE AMOUNT SHOWN. REPORTED RESULT INDICATES LIMIT OF SENSITIVITY AT WHICH TEST WAS PERFORMED. SEE TEXT FOR EXPLANATION.

# TRACE ELEMENTS
## NATIONAL WATER QUALITY NETWORK
## 1960 - 1961

| STATION | DATE | | CONCENTRATION —— MILLIGRAMS PER LITER | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | ANALYSIS BY WET OR FLAME METHOD | | | | | ANALYSIS BY SPECTROPHOTOGRAPHIC METHOD | | | | | | | | | | | | | | | | |
| | FROM | TO | B | F | K | Na | Se | Cd | Ba | Be | Pb | Cr | Sn | Sb | Mn | Fe | Ni | Bi | Mo | V | Cu | Zn | Co | Ag |
| **SOUTH PLATTE RIVER**<br>at Julesburg, Colorado | 12-12-61<br>5-28-62 | 3-20-62<br>10-1-62 | .20<br>.24 | .90<br>.72 | 10.<br>19. | 128.<br>118. | .01*<br>.01* | .04*<br>.03* | .02<br>.03 | .0006*<br>.007* | .06*<br>.07* | .01*<br>.01 | .02*<br>.03* | .1*<br>.1* | .05*<br>.03* | .1<br>.07 | .02*<br>.03* | .06*<br>.07* | .02*<br>.03* | .02*<br>.03* | .004*<br>.007 | 6.*<br>.3* | .02*<br>.03* | .0006*<br>.0007 |
| SPOKANE RIVER<br>at Post Falls Dam, Idaho | 5-14-62 | 10-1-62 | .10 | .08 | .8 | 2. | .01* | .001* | .008 | .0002* | .002* | .0004* | .001* | .004 | .001* | .002 | .001* | .002* | .001* | .001* | .003 | .006 | .001* | .00002* |
| SUSQUEHANNA RIVER<br>at Conowingo, Maryland | 12-27-61<br>3-21-62 | 3-14-62<br>9-5-62 | .03<br>.04 | .08<br>.08 | 2.5<br>2.1 | 6.<br>9. | .01*<br>.01* | .004*<br>.005* | .003<br>.01 | .00007*<br>.001* | .007*<br>.01* | .005<br>.002* | .003*<br>.005* | .01*<br>.02* | .005<br>.005* | .009<br>.005 | .007<br>.005* | .007*<br>.01* | .003*<br>.005* | .003*<br>.005* | .01<br>.006 | .7*<br>.05* | .003*<br>.005* | .0007<br>.0001 |
| at Sayre, Pennsylvania | 12-12-61<br>4-2-62 | 3-20-62<br>9-17-62 | .03<br>.03 | .03<br>.19 | 2.0<br>1.7 | 5.<br>6. | .01*<br>.01* | .003*<br>.004* | .02<br>.02 | .00005*<br>.0008* | .005*<br>.008* | .003<br>.002 | .002*<br>.004* | .01*<br>.02* | .006<br>.004* | .02<br>.008 | .002<br>.004* | .005*<br>.008* | .002*<br>.004* | .002*<br>.004* | .007<br>.005 | .5*<br>.04* | .002*<br>.004* | .00005*<br>.00008* |
| TENNESSEE RIVER<br>at Pickwick Landing Dam, Tennessee | 1-2-62<br>2-13-62 | 3-20-62<br>9-13-62 | .03<br>.01* | .08<br>.30 | 1.6<br>1.7 | 4.<br>3. | .01*<br>.01* | .003*<br>.003* | .003<br>.01 | .00004*<br>.0005* | .007<br>.006 | .0009*<br>.002 | .002*<br>.003* | .009*<br>.01* | .004<br>.003* | .04<br>.02 | .002*<br>.003* | .004*<br>.006* | .003<br>.003* | .002*<br>.003* | .006<br>.02 | .4*<br>.03 | .002*<br>.003* | .00004*<br>.003 |
| at Bridgeport, Alabama | 12-26-61<br>4-25-62 | 2-28-62<br>9-12-62 | .03<br>.08 | .08<br>.20 | 2.2<br>1.3 | 6.<br>6. | .01*<br>.01* | .002*<br>.002* | .007<br>.02 | .00004*<br>.0005* | .004*<br>.005* | .0008*<br>.001 | .002*<br>.002* | .008*<br>.01* | .007<br>.002* | .03<br>.1 | .002*<br>.005 | .004*<br>.005* | .003<br>.002* | .002*<br>.002* | .003<br>.006 | .4*<br>.05 | .002*<br>.002* | .00004*<br>.00005* |
| at Chattanooga, Tenn. | 12-27-61<br>5-2-62 | 4-4-62<br>9-19-62 | .03<br>.05 | .03<br>.20 | 1.6<br>1.3 | 4.<br>7. | .01*<br>.01* | .003*<br>.002* | .006<br>.03 | .00004*<br>.0005* | .004*<br>.005* | .0009*<br>.001 | .002*<br>.002* | .009*<br>.01* | .003*<br>.002* | .03<br>.04 | .002*<br>.002 | .004*<br>.005* | .002*<br>.002* | .002*<br>.002* | .03<br>.006 | .4*<br>.02* | .002*<br>.002* | .003<br>.00005 |
| at Lenoir City, Tenn. | 12-12-61<br>3-19-62 | 3-20-62<br>9-17-62 | .02<br>.05 | .03<br>.14 | 1.9<br>2.0 | 7.<br>9. | .01*<br>.01* | .004*<br>.004* | .03<br>.02 | .00006*<br>.0008* | .006*<br>.008* | .001*<br>.002* | .003*<br>.004* | .01*<br>.02* | .005*<br>.004* | .06<br>.008 | .003*<br>.004* | .006*<br>.008* | .003*<br>.004* | .003*<br>.004* | .01<br>.01 | .6*<br>.04* | .003*<br>.004* | .00008<br>.00008* |
| TOMBIGBEE RIVER<br>below Columbus, Miss. | 12-28-61<br>4-2-62 | 3-19-62<br>8-13-62 | .08<br>.03 | .00<br>.08 | 1.6<br>1.6 | 3.<br>3. | .01*<br>.01* | .002<br>.002* | .02<br>.02 | .00003*<br>.0003* | .003<br>.003 | .0006*<br>.0006* | .001*<br>.002* | .006*<br>.006* | .004<br>.002* | .1<br>.006 | .004<br>.002* | .003*<br>.003* | .001*<br>.002* | .001*<br>.002* | .06<br>.003 | .3*<br>.02 | .001*<br>.002* | .0002<br>.00006 |
| TRUCKEE RIVER<br>at Farad, California below Calif.-Nev. border | 1-8-62<br>4-9-62 | 3-12-62<br>9-28-62 | .09<br>.02 | .03<br>.14 | 2.2<br>1.7 | 7.<br>3. | .01*<br>.01* | .003*<br>.002* | .03<br>.01 | .00005*<br>.0004* | .005<br>.004* | .001*<br>.0007* | .002*<br>.002* | .01*<br>.007* | .02<br>.002* | .08<br>.002 | .07<br>.002* | .005*<br>.004* | .003<br>.002 | .002*<br>.002* | .04<br>.004 | .5*<br>.07 | .002*<br>.002* | .0001<br>.00004 |
| VERDIGRIS RIVER<br>at Nowata, Oklahoma | 3-26-62 | 9-17-62 | .04 | .30 | 3.8 | 52. | .01* | .009* | .09 | .002* | .02* | .004* | .009* | .04* | .009* | .02 | .009* | .02* | .009* | .009* | .004 | .09* | .009* | .002 |
| WABASH RIVER<br>at New Harmony, Indiana | 1-10-62<br>3-24-62 | 3-17-62<br>9-8-62 | .03<br>.08 | .14<br>.25 | 2.8<br>2.9 | 9.<br>12. | .01*<br>.01* | .007*<br>.007* | .07<br>.02 | .0001*<br>.002* | .01<br>.02* | .005<br>.003* | .005*<br>.007* | .02*<br>.03* | .01*<br>.007* | .1<br>.02 | .02<br>.007* | .01*<br>.02* | .007<br>.007* | .005*<br>.007* | .2<br>.003 | 1.*<br>.07* | .005*<br>.007* | .01<br>.0002* |
| WILLAMETTE RIVER<br>at Portland, Oregon | 8-13-62 | 9-7-62 | .05 | .14 | 1.1 | 6. | .01* | .002* | .004 | .0004* | .004* | .0008* | .002* | .008* | .002* | .04 | .002* | .004* | .002* | .002 | .02 | .04 | .002* | .0003 |
| YAKIMA RIVER<br>at Richland, Washington | 12-12-61<br>4-30-62 | 3-20-62<br>9-10-62 | .06<br>.01* | .15<br>.30 | 2.5<br>3.3 | 12.<br>12. | .01*<br>.01* | .004*<br>.005* | .003<br>.02 | .00007*<br>.001* | .007*<br>.01* | .001*<br>.002* | .003*<br>.005* | .01*<br>.02* | .006*<br>.005* | .006<br>.005 | .003*<br>.005* | .007*<br>.01* | .003<br>.005* | .003*<br>.01 | .04<br>.006 | .7*<br>.05* | .003*<br>.005* | .00007*<br>.0001* |
| YELLOWSTONE RIVER<br>near Sidney, Montana | 12-26-61<br>4-2-62 | 3-19-62<br>9-6-62 | .19<br>.12 | .54<br>.35 | 4.9<br>4.5 | 72.<br>50. | .01*<br>.01* | .01*<br>.009* | .03<br>.03 | .0002*<br>.002* | .02*<br>.02* | .005*<br>.004* | .01*<br>.009* | .05*<br>.04* | .02*<br>.009* | .1<br>.009* | .01<br>.009* | .02*<br>.02* | .01*<br>.009* | .01*<br>.009* | .01<br>.008 | 2.*<br>.09* | .01*<br>.009* | .0002*<br>.0002* |

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U.S. PUBLIC HEALTH SERVICE 1798

# National Water Quality Network

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